MEMORANDUM

To:

Board Members

Date: November 27, 2006

From:

Elliot Block, Chief Counsel

Ellet W. Bloke

CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

Subject:

FISHBACK APPEAL HEARING

OBJECTIONS TO PORTIONS OF ADMINISTRATIVE RECORD

The parties have agreed to which items constitute the Administrative Record for this appeal, with the exception of the items noted below. The Board will only need to decide if these items are properly part of the Administrative Record if it wishes to consider them as a basis for its decision.

Public Resources Code Section 45032(a) provides that:

In the board's hearing on the appeal, the evidence before the board shall consist of the record before the hearing panel or hearing officer, relevant facts as to any actions or inactions not subject to review by a hearing panel or hearing officer, the record before the local enforcement agency, written and oral arguments submitted by the parties, and any other relevant evidence that, in the judgment of the board, should be considered to effectuate and implement the policies of this division.

Therefore, I will be recommending that the Board not consider these items that have been objected to because it is clear from the record that they were not considered by the hearing officer in making the decision which is the subject of this appeal. The parties provided the following arguments on this issue:

The Appellant, Mr. Fishback, objected to the following items:

At the original appeal hearing, Mr. Delperdang ruled that certain testimony would not be considered. Therefore, this testimony, in the form of letters and memoranda, cannot be transmitted to the Waste Board. The letters and memoranda in question can be found at Volume #4, pages 233 to 248. [Exhibits 9-12]

Mr. Delperdang's preliminary ruling is found at page 139 of Volume #7 of the Administrative Record, from the July 20, 2006 hearing. Therein, he states that in the next hearing (hearing August 31, 2006), only two witnesses would be heard; there would be public comment, and the hearing would be closed. In response to a question, the LEA also was told not to submit any more exhibits either.

Unfortunately, in between the July 20th hearing and the August 31st hearing, the LEA decided to submit additional testimony in the form of declarations with attached exhibits, <u>in direct violation</u> of Mr. Delperdang's order. Appellants' objections to that evidence is found beginning at page 163 of Volume #7 of the Administrative Record. I would strongly recommend that you read this portion of the transcript which goes on for 18 pages. At page 176, Mr. Delperdang rules that he will not accept any of the letters or the exhibits attached thereto. Thus, all this information should be omitted from the Administrative Record.

In addition, the Board must be cautioned not to consider any of the arguments by the LEA predicated on this additional evidence and testimony. Such argument is found in the LEA Brief dated August 29, 2006 and in the LEA Closing Brief dated September 18, 2006.

The Respondent, LEA, replies as follows:

After reading and reviewing the August 31, 2006 Hearing Officer hearing transcript (7 AR 160-264), conferring with Bob Gallagher and Bill Stratton, the EHD staff at the hearing or who are knowledgeable of what transpired at that hearing, and discussing this issue with the County Counsel attorney who was present at the August 31st hearing, the EHD/LEA disagrees with appellant's characterization of these documents and their request to have these documents removed from the Administrative Record. These documents ought to remain in the Administrative Record.

COUNTY OF VENTURA ENVIRNOMENTAL HEALTH DIVISION LOCAL ENFORCMENT AGENCY

INDEX OF DOCUMENTS FOR
THE COMPLETE ADMINISTRATIVE RECORD
OF THE ADMINISTRATIVE HEARING
FOR APPEAL OF
THE LOCAL ENFORCEMENT AGENCY (LEA)
CEASE AND DESIST ORDER
ISSUED TO WAYNE FISHBACK ON MAY 11, 2006



DOCUMENTS:

- 1. Appellant's May 26, 2006 request for hearing to appeal Cease and Desist Order
- 2. LEA's June 6, 2006 Response to Appeal filed by appellant
- 3. Appellant's July 18, 2006 Hearing Brief and Exhibits
- 4. LEA's August 29, 2006 Reply Brief to the July 18, 2006 Appellant's Brief
- 5. LEA Exhibits submitted to the Hearing Officer at the July 20, 2006 appeal hearing
- 6. Compilation of closing briefs:
 - a. Appellant's Closing Brief, September 18, 2006
 - b. LEA's Final Closing Brief, September 18, 2006
 - c. Hearing Officer NOTICE OF DECISION, September 22, 2006
- 7. Hearing Transcripts:
 - a. June 21, 2006 Hearing
 - b. July 20, 2006 Hearing
 - c. August 31, 2006 Hearing

RESOURCE MANAGEMENT AGENCY

county of ventura

Environmental Health Division
Robert Gallagher

Director

August 29, 2006

Jim Delperdang, Hearing Officer County of Ventura 800 South Victoria Ave. Ventura, CA 93009

ENVIRONMENTAL HEALTH DIVISION/LOCAL ENFORCEMENT AGENCY REPLY BRIEF TO APPELLANT'S BRIEF DATED JULY 18, 2006

Attached is the Environmental Health Division/Local Enforcement Agency Brief and a binder of exhibits submitted in reply to the Appellant's Brief dated July 18, 2006.

WILLIAM C. STRATTON, MANAGER TECHNICAL SERVICES SECTION ENVIRONMENTAL HEALTH DIVISION

Attachments



Ventura County Environmental Health Division 800 S. Victoria Ave., Ventura CA 93009-1730 TELEPHONE: 805/654-2813 or FAX: 805/654-2480 Internet Web Site Address: www.ventura.org/envhealth

ENVIRONMENTAL HEALTH DIVISION LOCAL ENFORCEMENT AGENCY REPLY BRIEF TO APPELLANT'S BRIEF DATED JULY 18, 2006

August 29, 2006

The County of Ventura Environmental Health Division (EHD) as the Local Enforcement Agency (LEA) in Ventura County provides this response to the brief filed by the appellant, Wayne Fishback (Fishback), to the hearing officer on July 18, 2006. (Exh. 1.) EHD is compelled to provide this response due to Fishback's egregious attempt to obfuscate the facts surrounding this case through misinformation, outright fabrication of information, selective and incorrect citation and interpretation of state statutes and regulations, and introduction of issues that are completely irrelevant to this case and only serve to distract from the purpose of the hearing. Fishback's brief should only be considered as argument and not fact or evidence.

FACTS

In March 2005, Fishback, by his own admission, began allowing the deposit of solid waste on his property. Fishback described the material as "fully cured concrete, stucco, and brick" (Appellant's Brief (hereinafter "Brief") p. 2, para. 3) as well as material from "demolition of patios, driveways, sidewalks or swimming pool operations." (Brief p. 12, para.1.) According to Fishback, this material was trucked off construction sites and

delivered to his property by the contractors. (Brief pp. 12-13.) After months of working with Fishback to obtain information and gain compliance, EHD issued a cease and desist order on May 11, 2006. The cease and desist order was required under Public Resources Code (PRC) section 44002 since Fishback was operating a solid waste facility without a permit. (Exh. 2.) On June 13, 2006, Fishback's Hillside and Erosion Control Ordinance (HECO) plan was approved by the Ventura County Resource Conservation District (VCRCD) for future erosion work on three new sites on his property, not the sites that are subject to the cease and desist order.

DISCUSSION

Fishback is operating a landfill without a permit. Between March 2005 and May 2006, Fishback disposed of solid waste, including asphalt, rubble, concrete, stucco, and construction debris, on his property. PRC section 40191 defines solid waste as "rubbish, . . . industrial wastes, . . . [and] demolition and construction wastes." He claimed he was using this solid waste for erosion control and hillside stabilization, and he claimed multiple exemptions for his actions. However, none of these exemptions apply or excuse him from the required EHD permit. Fishback's operation qualifies as an Inert Debris Type A disposal facility for which a solid waste facility permit is required.

Title 14 of the California Code of Regulations (CCR, tit. 14), Article 5.95, sections 17387 et seq. regulates disposal of construction and demolition waste and inert debris.

¹ See EHD's June 6, 2006, response to appeal filed by Fishback.

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Article 5.95, Type A inert debris "includes but is not limited to concrete. . . , fully cured asphalt, . . . asphalt or fiberglass roofing shingles, brick, . . . [and] plaster." (CCR, tit. 14 section 17388, subsection (I)). (Exh. 3. Article 5.95 in its entirety) These are all items that Fishback admits using in his operation. An Inert Debris Type A disposal facility means "a site where only Type A inert debris is disposed to land." (CCR, tit. 14 section 17388, subsection (m).) Inert Debris Type A disposal facilities must obtain a registration permit prior to operation. (CCR, tit. 14 section 17388.4)

Since Fishback is disposing of concrete, fully cured asphalt, brick and stucco on his property, Fishback's operation qualifies as an Inert Debris Type A disposal facility, and he must obtain a registration permit. Despite Fishback's numerous arguments to the contrary, he does not qualify for any exemptions to this requirement.

Fishback Is Disposing Of Solid Waste On His Property.

In section I and II of appellant's brief, Fishback admits to using "certain materials salvaged from other construction sites" which he further describes as "dirt, clean concrete, uncontaminated asphalt and rubble, material that is separated at the point of generation." Fishback claims that this material is not solid waste, his operation is not subject to state minimum standards concerning such materials, and EHD has no authority to regulate his operation. These claims are not supported by state laws and regulations or by case law.

All of the relevant statutes support EHD's position that Fishback is disposing solid waste on his property. For instance, PRC section 40191 (a) defines solid waste as "all putrescible and nonputrescible solid, semisolid, and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, dewatered, treated or chemically fixed sewage sludge which is not hazardous waste, and other discarded solid and semisolid wastes." (Exh. 4.) Fishback describes the material he is using as rubble, uncontaminated asphalt, concrete, brick, and stucco all of which are considered to be construction and demolition waste, inert debris and fall within the section 40191 definition.

CCR, tit. 14 section 17388 (c) defines construction and demolition waste as "the nonhazardous waste building materials, packaging and rubble resulting from construction, remodeling, repair and demolition operations on pavements, houses, commercial buildings and other structures." Fishback has admitted that contractors are delivering demolished patios, driveways, sidewalks and swimming pools and concrete, stucco and brick. All of these items qualify as building materials and rubble resulting from construction and demolition of pavements, houses, and other structures.

Inert debris is a more specific term for a certain type of solid waste. CCR, tit. 14 section 17388 (k) defines inert debris in pertinent part as "solid waste and recyclable materials that are source separated or separated for reuse and do not contain hazardous wastes or soluble pollutants at concentrations in excess of applicable water quality."

Type A inert debris, the type Fishback is using "includes but is not limited to concrete (including fiberglass or steel reinforcing bar embedded in the concrete), fully cured asphalt, crushed glass, fiberglass, asphalt or fiberglass roofing shingles, brick, slag, ceramics, plaster, clay and clay products." (CCR, tit. 14 section 17388 (I).)

CCR, tit. 14 section 17388 (e) defines disposal as "the final deposition of construction and demolition waste or inert debris onto land." By depositing the construction and demolition waste and inert debris onto his land, Fishback is disposing of the material. It is the final disposition of the material, meaning it will not be transported elsewhere.

CCR, tit. 14 section 17388.1 sets forth the regulatory tiers for construction and demolition waste and inert debris disposal operations and facilities.

CCR, tit. 14 sections 17388.3 through 17388.5 set forth the minimum standards for construction and demolition waste and inert debris disposal operations and facilities.

Since Fishback's material qualifies as Type A inert debris, he is regulated under CCR, tit. 14 section 17388.4. Under CCR, tit. 14 sections 17388.1 and 17388.4, he is required to obtain a registration permit. Finally, material needs to be discarded to be solid waste. (*Waste Management Inc. v. Palm Springs Recycling Center* (1994) 7 Cal.4th 478, 488.) This proposition is common sense; material is not waste until the owner throws it away. Here, the owner has discarded of the material and entrusted it to the contractor, for disposal, and the contractor has disposed of the material on Fishback's property.

Pursuant to the above cited law, Fishback is disposing of solid waste and is therefore subject to state minimum standards.

On page 18 of his brief, Fishback cites PRC section 41781.2 (c) as stating that "inert solids used for structural fill is not solid waste." (Brief p. 18, para. 1.) This is a misrepresentation of the law and its application. PRC section 41781.2(c) states, "For purposes of determining the base amount of solid waste from which the diversion requirements of this article shall be calculated, 'solid waste' does not include . . . inert solids, including inert solids used for structural fill" unless certain criteria are met. The definitions in this section are used in this section only, as is stated in section 41781.2 (b), and the purpose of this section is calculation of diversion rates. This section is stating that for purposes of diversion calculation only, inert solids do not count as solid waste, meaning that a jurisdiction must meet its required diversion rates without including inert solids in its total waste calculation.² Thus, Fishback's disposal of solid waste on his property does not count towards diversion rates.

In Fishback's operation, the material was discarded by the owner, given to the contractor, and transported by the contractor to Fishback's property for final deposition. EHD, acting as the LEA, not only has clear authority to regulate the Fishback operation, but is required to do so by PRC section 43209. (Exh. 5.)

² Diversion is further discussed below in Section III.

II. HECO and Ordinance No. 4308 Do Not Exempt Fishback From the Required Permit.

In his brief, Fishback argues that PRC and CCR, tit. 14 do not apply to his operation because he alleges this operation is in conformance with Ventura County ordinances and policies, including the HECO and Ordinance No. 4308. (Exhs. 6,7) This argument is specious. The Ventura County Ordinance Code and policies, in particular HECO and Ordinance No. 4308, do not contain any provisions that expressly exempt solid waste operations and facilities from the requirements of PRC and CCR, tit. 14, Article 5.95 (section 17387 et seq). In addition, PRC sections 40002 and 40053 and CCR, tit. 14, provide for the governing bodies of local agencies, such as the Ventura County Board of Supervisors, to adopt ordinances and requirements that do not conflict with or impose lesser requirements than the standards and requirements of PRC and CCR, tit. 14. Thus, the Ventura County Board of Supervisors does not have the authority to adopt an ordinance or ordinances that exempts the Fishback operation from PRC and CCR, tit. 14 standards and requirements. For instance, PRC section 40002 states in pertinent part:

"...it is in the public interest for the state, as a sovereign, to authorize and require local agencies, as subdivisions of the state, to make adequate provision for solid waste handling . . . consistent with the policies, standards and requirements of this division and all regulations adopted pursuant to this division."

PRC section 40053 states in pertinent part:

"This division, or any rules or regulations adopted thereto, is not a limitation on the power of a city, county, or district to impose and enforce reasonable land use conditions or restrictions . . . if the conditions or restrictions do not conflict with or impose lesser requirements than the policies, standards, and requirements of this division and all regulations adopted pursuant to this division."

CCR, tit. 14, section 17387 (c) states in pertinent part:

"Nothing in this article limits or restricts . . . local governments from promulgating laws which are as strict or stricter than the regulations contained in this Article. However, no local government may promulgate laws which are inconsistent with the provision of this Article."

The County has the authority to impose strict regulations. The PRC and CCR, tit. 14 set the minimum standards.

A. An Approved HECO Plan Does Not Exempt Fishback From Obtaining The Required Permit.

The information provided in the Fishback brief concerning HECO is misleading and taken out of context. Fishback maintains, in apparent contradiction, that he either

has a permit from VCRCD for the fill activities on his property; does not need a permit from VCRCD because of his self determination that his project is "exempt" from HECO; that VCRCD told him his project was exempt from HECO; and that HECO supersedes state laws and regulations concerning solid waste disposal.

Fishback's arguments fail for three reasons: (1) VCRCD does not issue permits, they approve plans; (2) Fishback's plan was approved on June 13, 2006, (after the issuance of the May 11, 2006, cease and desist order) for future work on different sites and it does not apply retroactively to the disposal sites at issue here; and (3) being exempt from HECO or having an approved HECO plan does not relieve Fishback from fulfilling the CCR, tit. 14 requirement to obtain a registration permit for disposal sites for Type A inert debris.

Fishback's arguments are inconsistent within his own brief. On page one, he states he has been doing erosion control and hillside stabilization work since March 2005 and that he "has a permit to do this work from the Ventura County Resource Conservation Department . . . " (Brief p. 1, para. 1.) However, on page four, Fishback states that through late 2005 and into early 2006 he stayed in contact with VCRCD which told him "his activities were either exempt as routine agricultural grading, or fell within the County's Hillside Erosion Control Ordinance . . ." (Brief p. 4.) Fishback then describes how he stayed in touch with the VCRCD and that the VCRCD on more than one occasion told him that his "work fell under the agricultural exemptions" in HECO. (Brief p. 5, para. 1.) Finally, Fishback maintains on page five that he obtained clearances for the erosion control work from VCRCD and that he already had a permit

from VCRCD in 2005. In direct contradiction, he states on page seven that, on May 15, 2006, "RCD approved Fishback's plan for the erosion control and hillside stabilization work being performed at the Ranch." (Brief p. 7, para. 2.)

In making these arguments, Fishback failed to reveal the following crucial facts concerning the involvement of VCRCD with the operations being carried out on his property.

First, VCRCD did not approve Fishback's HECO plan until June 13, 2006, for future work expected to begin in June 2006. (Exh. 2, Ch. III, Eng. Section.)(Exh. 8)

Second, the fill areas subject to the cease and desist order are not a part of this plan. (Exh. 2, Ch. III, Eng. Section.)

Finally, by letter dated August 12, 2006 (Exh. 9), from Dale Dean, VCRCD District Engineer, Mr. Dean states that there is no documentation on file in their office that the VCRCD approved, permitted, cleared or concurred with fill, grading or erosion control activities prior to June 2006. Mr. Dean reiterates this statement in the fourth paragraph in which he indicates the "HECO plan was approved at the June 13, 2006 Board Meeting authorizing work on three new fill sites. Old fill sites were not addressed in the HECO Plan."

- B. Ventura County Ordinances Including Ordinance No. 4308 Do Not Exempt Fishback From Obtaining the Required Permit.
- 1. Fishback's brief references statements, approvals, and authorizations from the County of Ventura Environmental and Energy Resources Division (EERD) which leads the reader to believe that the activities on the Fishback property conformed with or were exempt from all EERD permitting requirements; that EERD actively encourages agricultural operations to use construction debris in erosion control work; that Ventura County Ordinance No. 4308 exempts construction material of the exact type used in the Fishback erosion control project; and that Ventura County Ordinance No. 4258 somehow supersedes Ventura County Ordinance No. 4308 and state laws and regulations.

This is another attempt by Fishback to provide misleading and unfounded information in an attempt to legitimize his illegal solid waste disposal activities. By memorandum dated August 21, 2006, Bruce Belluschi, Manager of EERD, refutes the statements Fishback attributes to the EERD. (Exh. 10.)

2. Fishback makes numerous assertions on pages 2, 3, 4, 5 and 7 of his brief that the County of Ventura Public Works Agency, especially the grading division, has authorized, approved, or determined that grading activities were conforming to or exempt from permitting requirements. These assertions are factually incorrect. (See memorandum from Ray Gutierrez, Exh. 11.) In fact, three notices of grading non-

compliances have been recorded by the Public Works Agency against property owned or controlled by Fishback. (Exh. 12.)

III. Fishback's Activities Are Not Diversion, Reuse Or Recycling.

Fishback attempts to justify his solid waste facility by claiming that his acceptance of truckloads of solid waste is exempt from regulation because it qualifies as diversion, reuse, or recycling. He claims that his operation actually diverts this material from the landfills. Rather, Fishback has created a personal landfill in his backyard. He attracts contractors by allowing them to dump their waste at no charge when the permitted landfills would charge a fee. In addition, he claims that he is reusing or recycling the material even though there is no processing or reconditioning of the material.

A. Diversion

The California Integrated Waste Management Act of 1989 (Act) requires diversion of solid waste from the landfills. Diversion is defined as "activities which reduce or eliminate the amount of solid waste from solid waste disposal for purposes of this division including Article 1, (commencing with Section 41780) of Chapter 6." (PRC section 40124.) Each jurisdiction adopts a plan which includes a source reduction and recycling element, and part of that element is a required 50 percent diversion rate. (PRC section 41780.) As discussed above in Section I, when calculating the diversion rate, some items that qualify as solid waste in all other circumstances, do not count as Page (12) F:\Admin\TechServ Folder\Finaled Ltrs\TS Mgr\Fishback Reply to Appellant's 7-18-06 Brief 8 29 06.doc

solid waste for the diversion calculation, unless the jurisdiction can meet certain criteria.

These items include inert solids, agricultural waste, discarded white-coated major appliances, and scrap metals. (PRC section 41781.2 (c).)

Fishback claims that his use of solid waste for his "fill" operation is beneficial to the County because it qualifies as diversion, assisting the County in meeting its diversion requirements of the Act. In addition, he claims that his operation is reducing waste that would otherwise be transported to County landfills. However, to the extent the solid waste qualifies as inert solids, these items do not count towards the County's diversion rates. Even if it were transported to the permitted landfills, the landfills would not count it as solid waste for the diversion calculation. Thus, Fishback is not diverting the solid waste, he is disposing of it in his own personal landfill.

B. Reuse

Fishback claims that he is reusing these materials and relies on a definition from the California Integrated Waste Management Board (CIWMB) website which defines reuse as "using an item over again in its current form without significant processing that alters its material structure." (Brief p. 10.) However, in direct conflict with this definition, Fishback later states that material delivered to Fishback's property comes from contractors and that most of the material "is from the demolition of patios, driveways, sidewalks or swimming pool excavations..." (Brief p. 12.) Clearly, the material delivered to the Fishback property is not a driveway, sidewalk, or pool in its current

form, but rather waste from the deconstruction and demolition of driveways, sidewalks, and pools.

The website definition of reuse on which Fishback relies is not codified.

However, CCR, tit. 14 defines reuse for purposes of the Recycling Market Development Loan Program as taking "a product, rather than a material, which has served its useful life or is factory defective, and provide some new value to the product, by reconditioning, reprocessing, or some other process which makes the product usable again for its original intended purpose." (CCR, tit. 14 section 17931 (s).) Under this definition, Fishback is not reusing the material. Even under the definitions Fishback provides in his brief, his operation is not reusing the waste because he is not using the material for its original intended purpose.

C. Recycling

The PRC defines recycling as "the process of collecting, sorting, cleansing, treating, and reconstituting materials that would otherwise become solid waste, and returning them to the economic mainstream in the form of raw material for new, reused, or reconstituted products which meet the quality standards necessary to be used in the marketplace." (PRC section 40180.) Fishback is not processing, cleansing, treating, or reconstituting the material he is receiving and he is not returning it to the economic mainstream in the form of raw material. The waste, once it arrives on Fishback's property, is spread out and buried. This is the final deposition of the waste.

D. CIWMB Publication

Fishback references CIWMB publication "433-03-053" to support his claim that the use of "clean fill" which includes concrete, dirt and rubble, uncontaminated asphalt, brick and stucco is somehow not regulated by state solid waste laws and regulations. (Brief p. 16.) As is typical with the type of misleading and unfounded statements and information provided by Fishback, this CIWMB publication does not exist. By emails dated July 24, 25, 2006, CIWMB staff notified EHD that there is no record of this publication in their database. (Exh. 13.) According to state staff, the only publication with references to "clean" construction and demolition material on page 14 is CIWMB publication no. 433-03-023. (Exh. 14.) If we presume there is a typographical error in the Fishback brief and the publication he intended to reference is in fact the publication identified by CIWMB staff, a review of this document quickly reveals that the subject of the publication has nothing to do with the disposal of solid waste on Fishback's property.

The presumed publication is titled *The Capitol East End Office Complex: A Case for Construction and Demolition Waste Diversion*. The publication is dated December 2003. The only reference to "clean" material reads in pertinent part, " According to the demolition contractor, the labor for processing asphalt concrete into sized, 'clean' material (that is, material acceptable at no charge at the EBI Aggregates facility) was considered standard demolition practice for inert materials in the Sacramento area." (CIWMB, p. 14, para.5.) Clearly the information in this publication has no relevance to

the disposal of solid waste on Fishback's property. Moreover, the publication includes the following disclaimer:

"The statements and conclusions of this report are those of the contractor and not necessarily those of the California Integrated Waste Management Board, its employees, or the State of California. The State makes no warranty, expressed or implied, and assumes no liability for the information contained in the succeeding text. Any mention of commercial products or processes shall not be construed as an endorsement of such products or processes."

IV. Waste Management Inc. v. Palm Springs Recycling Center Does Not Apply.

To further support his case, Fishback references a California Supreme Court case of *Waste Management Inc. v. Palm Springs Recycling Center* (1994) 7 Cal.4th 478. (Exh. 15.) In *Waste Management Inc.*, Waste Management of the Desert brought suit to prevent Palm Springs Recycling Center from collecting recyclable material within the city. Waste Management of the Desert had the exclusive franchise agreement with the city for the collection and disposal of residential and commercial waste. (*Waste Management Inc. v. Palm Springs Recycling Center* (1994) 7 Cal.4th 478, 482.)

The Act authorizes cities to grant exclusive franchises for solid waste handling services. (PRC, section 40059, subd.(a)(2).) The question before the court was very

focused: whether or not the exclusive franchise authority "extends so far as to prohibit the owner of recyclable materials from selling them to someone other than the exclusive franchisee." (*Waste Management Inc. v. Palm Springs Recycling Center* (1994) 7 Cal.4th 478, 481.) The court held that the "Act does not allow an exclusive franchise for the collection of recyclables not discarded by their owner . . . the Act authorizes exclusive franchises only for "solid waste handling." (*Id.* at 481-481.) An item that is sold is not discarded and thus does not become "waste" subject to an exclusive franchise." In other words, an item is not waste unless it is discarded. (*Id.* at 488.)

The essence of this case can be characterized as a dispute between a City's franchise solid waste collection company and a local recycling business. Both parties are businesses vying for the right to receive recyclable solid waste materials for the purpose of selling these materials. The materials will then be processed and returned to the economic mainstream in the form of raw material for new, reused, or reconstituted products that meet quality standards to be used in the marketplace.

Clearly this case does not address the ultimate final deposition of solid waste recyclables and does not suggest these materials can be buried at these businesses. Fishback is neither a franchise solid waste hauler nor is he a permitted recycling facility in which recyclable solid waste materials are returned to the economic mainstream. Fishback admits that he "allowed the deposit of clean fill on the Ranch, which consisted of dirt, fully cured concrete, stucco, and brick." (Brief p. 2.)

Subsequent to the Waste Management, Inc. decision, the CIWMB enacted an entire body of regulations to address operations and facilities that receive, handle, process, store, and dispose of solid wastes and waste derived materials. These regulations include the California Code of Regulations Title 14, Chapter 3.0, Articles, 5.9 (Construction and Demolition and Inert Debris Transfer/Processing Regulatory Requirements); 5.95 (Construction and Demolition Waste and Inert Debris Disposal Regulatory Requirements); 6.0 (Transfer/Processing Operations and Facilities Regulatory Requirements); and Chapter 3.1 (Compostable Materials Handling Operations and Facilities Regulatory Requirements). Each of these Articles contain a subsection which states this Chapter or Article, "is adopted pursuant to and for the purpose of implementing the California Integrated Waste Management Act of 1989 (Act) commencing with section 40000 of the Public Resources Code (PRC), as amended. These regulations should be read together with the Act." The legislature recognized the potential adverse impact to public health and the environment from the storage, handling, processing, and disposal of solid waste in the form of recyclable materials diverted from disposal as a result of the Act and provided for the development of regulations to mitigate these impacts.

Executive Order No. S-2-03 requires each state agency to reassess the regulatory impact on California business of any regulation for which it has adopted, amended or repealed since January 6, 1999. On January 21, 2004, the CIWMB submitted to the Governor's office its report on the regulatory impact of regulations adopted, amended or repealed by the CIWMB since January 6, 1999. (Exh. 16.) In this report, the CIWMB confirmed it had the authority to adopt each of the regulations listed F:\Admin\TechServ Folder\Finaled Ltrs\TS Mgr\Fishback Reply to Appellant's 7-18-06 Brief 8 29 06.doc Page 😘 and that these regulations meet the requirements of California Government Code, section 11349.1. Listed on page two of this report under the year 2003, the CIWMB lists construction, demolition and inert debris disposal.

In Waste Management, Inc., the specific question before the court was about a franchise haulers' right to discarded material. The case clearly has no relevance to the disposal of solid waste on Fishback's property. The Title 14 Regulations, adopted since the court's decision, regulates any subsequent legal question as to operations and facilities involved with the storage, handling, processing and disposal of solid waste including recyclable materials.

V. None Of The CCR Title 14 Exclusions Apply To Fishback.

Fishback claims numerous "exemptions" from the Title 14 regulations including that he is an engineered fill operation, he is using the solid waste in construction, and he is using the solid waste in grading. None of these "exemptions" apply.

Title 14, section 17388.2, lists activities excluded from regulation under Article 5.95, Construction and Demolition Waste and Inert Debris Disposal Regulatory Requirements. One exclusion is for inert debris engineered fill activities. Section 17388.2 (a)(3) states, "Inert debris engineered fill activities which conclude within one year of commencement and that meet all of the requirements of section 17388.3 of this Article. . ." Fishback alludes to this exclusion as an exemption when he claims to have employed a civil engineer to oversee the operation. However, Fishback did not hire the

engineer prior to beginning his "fill" operation and did not have engineering plans to provide to EHD. In addition, he did not complete the fill activities within the one-year time line.

Article 5.95 also includes an exclusion for inert debris used in construction activities by the Federal, State, and local government public works agencies and their contractors. (Section 17388.2 (a)(6).) Section 17388 (a)(6) states an exclusion for "[t]he use of fully cured asphalt, uncontaminated concrete (including steel reinforcing rods embedded in the concrete, crushed glass, brick, ceramics, clay and clay products, which may be mixed with rock and soil, in connection with road building, road repair, airport runway construction, bridge and roadway work, levee work, flood control work, and all associated activities by Federal, State and local government public works agencies and their contractors." Fishback is using this material but he is not constructing or repairing a road, airport runway, or bridge or conducting levee work or flood control work. More importantly, the exclusion is for work conducted by the government or their contractors.

Fishback also claims an exemption for grading. Article 5.9 contains an exclusion for "Grading or clearing of land that is consistent with local ordinances." (Section 17382 (a)(3).) Article 5.9 does not apply to operations that are wholly governed by regulations elsewhere, such as Article 5.95 that applies to Fishback. (Section 17380(b)) Regardless, Fishback's grading is not consistent with local ordinances as is evidenced by the Notices of Violation recorded by the Ventura County Public Works Agency.

Thus, none of the "exemptions" claimed or alluded to by Fishback apply to his solid waste operation.

VI. EHD Is Complying With The Law.

EHD, acting as the LEA, is required to enforce the provisions of the Act.

(PRC section 43209.) One of these provisions, PRC section 44002, required EHD to immediately issue a cease and desist order once it determined that Fishback was operating a solid waste facility without a permit. EHD responded to multiple complaints about Fishback's operation. These complaints led to an investigation and ultimately to the determination that Fishback's operation was an Inert Debris Type A disposal facility. EHD's investigation also confirmed that Fishback did not have a permit. Fishback claims the County is singling him out while allowing similar operations to proceed without interference; and that he has documented lists of violations at a permitted facility currently engaged in the same type of activity for which Fishback believes he is being singled out for enforcement. (Brief p. 19.)

The cease and desist order issued by EHD to Fishback was directly related to the disposal of solid waste on Fishback's property and was not influenced by what may or may not be occurring on other properties in Ventura County. EHD is complaint driven. EHD is actively investigating a number of complaints concerning property owners that are allowing the disposal of solid waste, including construction and demolition waste and inert debris on their properties, without solid waste facilities

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permits. Further action, including the issuance of cease and desist orders, may be taken at the conclusion of these investigations.

CONCLUSION

In conclusion, the Fishback brief is filled with misinformation, fabrication of facts about permits and authorization from various County agencies and special districts, and selective interpretation of solid waste laws and regulations all intended to distract from the facts in this case. In reality, the facts are as follows:

- 1. State law defines construction and demolition material and inert debris as solid waste.
- 2. State regulations have been enacted which establish minimum standards for the handling, storage, processing, use and disposal of solid waste; and
 - 3. Fishback has failed to comply with these minimum standards.

EXHIBITS, August 29, 2006

ENVIRONMENTAL HEALTH DIVISION, LOCAL ENFORCEMENT AGENCY REPLY BRIEF TO APPELLANT'S BRIEF DATED JULY 18, 2006

EXHIBIT	1	APPELLANT'S BRIEF, JULY 18, 2006 CONCERNING CEASE AND DESIST ORDER TO WAYNE FISHBACK
EXHIBIT	2	PUBLIC RESOURCES CODE, SECTION 44002
EXHIBIT	3	CALIFORNIA CODE OF REGULATIONS, TITLE 14, ARTICLE 5.95, SECTION 17387 - SECTION 17390
EXHIBIT	4	PUBLIC RESOURCES CODE, DIVISION 30. WASTE MANAGEMENT, PART 1. INTEGRATED WASTE MANAGEMENT, CHAPTER 1. DEFINITIONS
EXHIBIT	5	PUBLIC RESOURCES CODE, SECTION 43209
EXHIBIT	6	HILLSIDE EROSION CONTROL ORDINANCE NO. 3683 (HECO)
EXHIBIT	7	VENTURA COUNTY ORDINANCE CODE NO. 4308 SOLID WASTE HANDLING, DISPOSAL, REDUCTION AND DIVERSION
EXHIBIT	8	HECO PLAN 174 FOR MR. WAYNE FISHBACK
EXHIBIT	9	VENTURA COUNTY RESOURCE CONSERVATION DISTRICT (RCD) LETTER TO MR. WILLIAM STRATTON, MGR., EHD, August 12, 2006
EXHIBIT	10	VENTURA PUBLIC WORKS AGENCY, EERD MEMORANDUM TO WILLIAM STRATTON, EHD, August 21, 2006
EXHIBIT	11	VENTURA PUBLIC WORKS AGENCY, DEVELOPMENT & INSPECTION SERVICES DIVISION MEMORANDUM TO WILLIAM STRATTON, EHD, August 25, 2006
EXHIBIT	12	VENTURA PUBLIC WORKS AGENCY, ENGINEERING SERVICES RECORDATION OF NOTICES OF NON-COMPLIANCE
EXHIBIT	13	EMAIL INQUIRIES REGARDING CIWMB PUBLICATION # 433-03-053
EXHIBIT	14	CIWMB PUBLICATION #433-03-023 The Capitol East End Office Complex: A Case for Construction and Demolition Waste Diversion
EXHIBIT	15	CALIFORNIA SUPREME COURT CASE Waste Management v. Palm Springs Recycling Center (1994)
EXHIBIT	16 .	CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD MEMORANDUM: REPORT ON REGULATORY IMPACTS, January 21, 2004

EXHIBIT 1 APPELLANT'S BRIEF, JULY 18, 2006 CONCERNING CEASE AND DESIST ORDER TO WAYNE FISHBACK

Law Office of K.M. Neiswender

Litigation ❖ Land Use ❖ Business Post Office Box 24617 Ventura, California 93002 voice: 805.649-5575 fax: 805.649.8188

e-mail: kmn@inreach.com

July 18, 2006

Jim Delperdang Hearing Officer County of Ventura 800 So. Victoria Ave. Ventura CA 93009

> Re: Fishback Appeal from Cease and Desist Order of Environmental Health Division

Hearing Set for July 20, 2006 at 9:00 a.m.

Dear Mr. Delperdang:

We enclose the appellant's hearing brief in this matter, along with a binder of exhibits for the hearing itself.

However, we would like to alert you to the fact that a short continuance is necessary. We received information from the Environmental Health Division that they suspected regulated materials, including asbestos, may have been used in the erosion control work at the Fishback Ranch. In order to deal with this allegation, we ordered soils tests and the written report will not be ready in time for the hearing.

In addition, Mr. Fishback has hired an expert named Kelly Astor who will not be available on Thurday, July 20th. We would suggest a two-to-three week continuance, rescheduling the hearing for the week of August 7th. Mr. Astor is available on August 8th, 9th or 11th, if you could please accommodate his schedule.

Thank you.

Kate M. Neiswender

Sincerely

JUI 18 2006

KATE M. NEISWENDER LAW OFFICE OF K.M. NEISWENDER Post Office Box 24617 Ventura, California 93002

voice: 805/649-5575 fax: 805/649-8188

In re:) APPELLANT'S BRIEF
) CONCERNING CEASE AND
WAYNE FISHBACK,) DESIST ORDER BY THE
) ENVIRONMENTAL HEALTH
Appellant,) DIVISION
)
) Hearing Date: July 20, 2006
)

I. Introduction

Wayne Fishback owns or controls about 120 acres of agricultural property in the Simi Hills. During the 2004-2005 rains, huge landslides occurred, and since March of 2005, he has been doing erosion control and hillside stabilization work, all with the assistance of a civil engineer. To accomplish this, he has utilized certain material salvaged from other construction sites. Fishback has a permit to do this work from the Ventura County Resource Conservation Department, which oversees agricultural grading and erosion control work under the County Hillside Erosion Control Ordinance, or HECO. Despite the HECO permit, the Environmental Health Division asserts that the laws and ordinances that govern "solid waste" apply. There is no basis in law or fact for this determination.

The material used in the erosion control and slope stabilization work is dirt, clean concrete, uncontaminated asphalt and rubble, material that is separated at the point of generation. It never enters the "waste stream and is therefore not regulated by the Ventura County Environmental Health Division. Such material is defined by the Integrated Waste Management

Act as "reuse" material. It is diverted from the waste stream and exempt from regulation under the Act.

Regarding the evidence presented: we have provided the Hearing Officer with a binder in which we have placed the evidence referenced in this Brief, as well as pertinent statutes, website pages from the California Integrated Waste Management Board and other materials. When we reference a document, the number listed is the tab number in the binder.

II. History of the Property and Appellant's Erosion Control Work

In 2000, Wayne Fishback and his wife Carol began to acquire real property in the Simi Hills. Eventually, the Fishbacks obtained title to approximately 20 acres, and control of another 100 acres through a purchase agreement. The land runs parallel to and on the northwest side of the North American Cutoff for approximately one mile by one thousand feet. The Fishbacks used the land for agricultural purposes, which includes a cattle and horse breeding operation. Hereinafter, this land will be referred to as the "Ranch."

The Fishbacks worked the Ranch through the winter of 2004-2005, when there were very heavy rains which caused major landslides and sediment run-off. After examining the area alone and with experts, Wayne Fishback decided to undertake a grading operation beginning in March of 2005. Prior to commencing work, Fishback contacted County Planning, County Grading, the Resource Conservation Department ("RCD"), the Environmental and Energy Resources Department, and the County Environmental Health Division ("EHD") to ensure he was conforming to or exempt from all permitting requirements. Fishback employed a civil engineering firm to design and inspect the work to insure that the grading met all applicable state and local laws. In furtherance of this work, Fishback allowed the deposit of clean fill on the Ranch, which consisted of dirt, fully cured concrete, stucco, and brick. This clean fill was used in the erosion control work, and was put into place only after advice and counsel from two civil engineering firms. At the height of the erosion control work, no more than thirty (30) trucks per

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day would deliver clean fill to the Ranch; at no time did Fishback accept payment from anyone for the deposit of clean fill on the Ranch. At no time was anything other than clean fill accepted at the Ranch. Each load of fill was examined by Ranch personnel to insure that it did not contain any materials that did not fit the definition of clean fill. Exhaustive documentation has been provided to EHD to support these facts.

In the spring of 2005, after Fishback had received verbal "OKs" from the County to move ahead with grading, a local environmental activist named Todd Doherty began to disseminate emails and other correspondence concerning the Fishback's Ranch, and the erosion control work. Doherty told Bill Stratton and others at the EHD that the Fishbacks were operating an "illegal dump," that the Fishbacks were destroying the environment in the Simi Hills, that they were allowing the dumping of 150 trucks per day of refuse, that they had deposited a half-million cubic yards of fill in the canyons on the Ranch, and that they had been paid millions of dollars by truckers for the dumping. Further, Doherty represented to others that Wayne Fishback had "stolen" land from Irma Murray, an elderly woman. Copies of some of these emails and letters can be found at Tab 4. Much of the public agency interest in the Ranch during 2005/2006 appears to have been generated by Doherty.

All the information spread by Doherty is false. The Fishbacks have never accepted any money for the dirt and concrete used in the erosion control work (however, the Fishbacks have incurred expenses associated with placement of the fill). There have never been more than 30 trucks a day going to the Fishback property, and that number is far above the average. To date, there has been a maximum of 20,000 cubic yards of fill used to stabilize the hillsides. As for Irma Murray, she has been dead for many years; her 90 year-old daughter still owns the property in question. There has never been any trash dumped at the Ranch or any neighboring property. The only material used in the erosion control work is clean fill.

Doherty's underlying purpose in spreading this misinformation about the Fishbacks appears to be linked to a desire to obtain the Fishback land for permanent open space. Doherty's

emails have been sent to the Santa Monica Mountains Conservancy and the Santa Susana Mountains Park Association, claiming the Fishback Ranch must be made part of the Sage Ranch habitat area, in order to protect the Simi Hills. Because Doherty's emails are false, accusing the Fishbacks of illegal activity and the "theft" of land, Doherty and others have been sued by the Fishbacks for Defamation in Ventura County Superior Court (Tab 5).

From the time grading commenced in spring 2005 through January of 2006, Fishback remained in contact with various County agencies, including Public Works. Between January of 2005, when Fishback first went to the County inquiring about permits, and January of 2006, numerous state and County officials had visited the Ranch; much of the interest seems to have been generated by Doherty's emails. Department of Fish and Game Lieutenant Chris Long spent five hours on the Ranch and informed Fishback that there were no violations of the Fish & Game Code. Fishback also spoke with officials at the Regional Water Quality Control Board, who did two inspections. Keith Mashburn of Supervisor Judy Mickels' office toured the site numerous times as did Dale Dean of the RCD. Fishback also spoke with Jim Meyers in the County's Development & Inspection Division, and Pandee Leachman at the Ventura County Environmental and Energy Resources Division, who told Fishback that the County is actively encouraging agricultural operations to utilize the type of clean fill for erosion control, specifically because it keeps such materials out of County landfills. None of the official agencies contacted by Fishback between early 2005 and January of 2006 informed him that he was acting in violation of law, except for Jim Meyers who issued a violation for alleged grading improprieties in May of 2005, but later rescinded the notice in August of 2005 after a meeting with Fishback, Fishback's civil engineer (Phil Sherman of Hawks & Associates), and Ray Gutierrez.

Through late 2005 and into early 2006, Fishback stayed in contact with the RCD which told him his activities were either exempt as routine agricultural grading, or fell within the County's Hillside Erosion Control Ordinance (also known as "HECO"); the HECO is at Tab 2 in the binder. RCD asked Fishback to stay in contact with them, in order to insure that his

continuing activities did not violate the County's HECO. Fishback continued to provide updates to RCD, and was told on more than one occasion that his work fell under the agricultural exemptions (see HECO section 2.011(a), Tab 2). In January of 2006, RCD informed Bill Stratton of the Environmental Health Division that HECO covered the type of activities carried out by Fishback, and that "requiring all HECO applicants to file with EHD is redundant and adds an unnecessary step..." (Tab 3).

Thus, as of today, after more than a year of erosion control work, supported by engineering from a registered civil engineering firm, no County or state agency was claiming Fishback was involved in any illegal or improper activity at the Ranch, with the exception of EHD. EHD's interest was triggered in December of 2005.

In response to a complaint letter written by Doherty to the Governor's office in December of 2005, the EHD began inquiring about the "solid waste" being deposited onto the Ranch. Due to Doherty's continuous harassment, past litigation between Fishback and the County's Resource Management Agency, and questionable representations by EHD as to the extent of its authority, Fishback submitted a formal application to RCD for a written exemption or an approved plan!.

As noted above, Fishback received an approved HECO plan (Tab 1).

Nevertheless, EHD sent a letter to Fishback on February 2, 2006, in which EHD accused Fishback of disposing of "solid waste" on the Ranch (Tab 6). That letter failed to inform Fishback that he was being investigated as a result of a complaint by Todd Doherty. Fishback responded On February 15, 2006 (Tab 7), objecting to the use of the term "solid waste," and explaining that the regulations do not affect his right to effect erosion and stabilization repairs on his agricultural property. On February 22, 2006, Bill Stratton, Richard Hauge and Diane Hall of EHD toured the Ranch, accompanied by Kitty Oliver and Bill Marciniak of the California

¹ Based on conversations with RCD personnel and a review of the HECO, Fishback did not believe, and still does not believe, that a formal HECO permit was needed, as his land fell within the 10% exemption. Nevertheless, out of an abundance of caution, he applied for an obtained a HECO permit.

Integrated Waste Management Board, and Keith Mashburn of Supervisor Judy Mickels' office. During the site visit, both Marcinaik and Stratton were asked why they were involved, when the Ranch work fell under the HECO. Marciniak replied: "I don't care about HECO." Stratton's comment was "HECO is a local ordinance. A County ordinance is what it is. Has nothing to do with this."

Stratton and Marciniak were also asked about diversion regulations which govern the reuse of inert materials (such as that used in the Ranch erosion control work). Stratton responded, "I don't have an answer for you because we [EHD] are not involved with the diversion goals, if you will, it is a separate County agency which is responsible for how the County meets its [AB] 939 diversion goals." Later during the site visit, Fishback specifically asked why EHD was not coordinating his enforcement with County ordinances regarding diversion, and he replied: "Can't answer that because my department doesn't enforce that portion of that code." As a result of that site visit, Stratton of EHD wrote Fishback a letter, claiming Fishback may be operating a solid waste disposal facility at the Ranch, and asking for more information (Tab 8).

Fishback responded on March 17, 2006 (Tab 9), providing citations to state codes and regulations, and local ordinances, and informing EHD that until the situation could be straightened out, no further fill would be accepted for the erosion control work unless it was free of concrete, rubble, stucco and brick; i.e., only dirt would be accepted on the Ranch.

Specifically, Fishback informed EHD of the provisions in the California Code of Regulations that exempted erosion control work of the type conducted on the Ranch, as well as the RCD determination that the Fishbacks' work was allowed under HECO.

EHD responded April 4, 2006, refusing to acknowledge the citations and other information provided by Fishback in the March letter. In the April 4th letter, EHD made a formal determination that Fishback was operating a solid waste disposal facility, and claimed that a Type A lnert Debris solid waste registration tier permit was required (Tab 10). EHD refused to

acknowledge that the Fishbacks were operating within the diversion regulations promulgated by the California Integrated Waste Management Board and the County's own Environmental and Energy Resources Division. EHD refused to even respond to the fact that Fishback had obtained clearances for the erosion control work from RCD, the Environmental and Energy Resources Division, Public Works, Fish & Game, and other agencies. On May 12, 2006, EHD has issued a "Cease and Desist" order. It is the April 4, 2006 determination and the May 12, 2006 Cease and Desist letter which are being challenged by the Fishbacks in this appeal.

On May 15, 2006, RCD approved the Fishbacks' plan for the erosion control and hillside stabilization work being performed at the Ranch (Tab 1). The plan includes a Stormwater Pollution Plan, a Mulching Plan, an Irrigation Water Plan, A Pest Management Plan, a Nutrient Management Plan, and – in the Engineering Section – requires hydrology calculations and engineering plans. The HECO Plan states:

"The objective is to protect the resource base and develop a sustainable pasture for the breeding operation. And also by addressing sediment and drainage concerns through the use of essential and needed conservation management and engineering practices. . . . ¶ . . . The Ventura County RCD limits the number of listed inert materials to clean, stable items that can be engineered for stability and enhance the agricultural base."

Thus, the hillside stabilization and erosion control work being conducted by Fishback was contemplated under state and local laws and ordinances. In essence, EHD wants to "repeal" all these laws in order to placate an environmental activist who has been spreading misinformation about the Fishbacks' operation in order to further his own agenda.

III. Applicable Law

The questions in this appeal center around what is "waste" and what is not waste. Oddly, it can be best expressed in the axiom, "One man's trash is another man's treasure." That old

saying was used to describe this problem in the California Supreme Court case of Waste Management Inc. v. Palm Springs Recycling Center (1994) 7 Cal. 4th 478, one of the few California cases that address this issue.

In that case, Waste Management had the exclusive contract to pick up all the trash in Palm Springs. But there was a little company that encouraged people to bring their recyclables to Palm Springs Recycling Center, where they would get paid for bottles and cans. Waste Management tried to shut them down, saying Waste Management's contract was for all the trash in the City, and that the recycling center was taking what rightfully belonged to Waste Management.

The Supreme Court agreed with the Recycling Center, saying that until a citizen put their cans and bottles in the garbage bins in front of their house, the bottles and cans belonged to them, and they could do what they chose with those materials. Until a bottle or can is put in a trashcan, it is <u>not</u> "waste." Instead, it is a valuable material that can be sold.

The Supreme Court held that the Integrated Waste Management Act of 1989 repeatedly references "solid waste," "solid waste handling," "recycling of solid waste," and the like, strongly indicating "the Legislature was concerned with just what it said – waste – and not materials of economic value to their owner." (7 Cal. 4th at 485).

In support of the conclusion that something is not "waste" if it has independent value to the owner, the owner has not discarded it, and the material can be either recycled or reused, the Supreme Court cited to cases from across the United States. The holding was very clear: if something has value, is not discarded by the owner but is reused or recycled, then it is not "waste" and not subject to the Integrated Waste Management Act (a complete copy of the Waste Management case is at Tab 11).

The statutes and the regulations echo this conclusion. The Integrated Waste Management Act is codified in the Public Resources Code at §§40000 et seq. The regulations that support of the Act are located at 14 C.C.R. §§17000 et seq.

Diversion of materials away from the waste stream is one of the key goals of the Integrated Waste Management Act. Section 42000 states the Legislative purpose behind the diversion goals:

"This division requires cities and counties to divert 25 percent of all solid waste from landfills and transformation facilities by 1995 and 50 percent by 2000. As of 1990, the overall diversion rate in the state was 12 percent."

In order to accomplish this goal, reuse and recycling was declared a primary goal of the state.

The websites established by the Integrated Waste Management Board also emphasize reuse and recycling. From the Waste Board's "Zero Waste California" webpage:

"Imagine a "Zero Waste California"—it is an image and philosophy that rings with hope and prosperity for the future of our Golden State.

"California is a state rich in natural resources and has an environment unlike any other, and those resources need to be protected. In that effort, Zero Waste California stretches beyond our previously imagined goals. . . .

Californians know how to "reduce, reuse, and recycle." . . . Zero Waste is based on the concept that wasting resources is inefficient and that efficient use of our natural resources is what we should work to achieve. It requires that we maximize our existing recycling and reuse efforts, while ensuring that products are designed for the environment and have the potential to be repaired, reused, or recycled. "The success of Zero Waste requires that we redefine the concept of 'waste' in our society. In the past, waste was considered a natural by-product of our culture.

Now, it is time to recognize that proper resource management, not waste management, is at the heart of reducing waste sent to landfills." (Tab 12)

Zero waste and efforts to reuse or recycle is a stated goal of the Waste Board. There is a

webpage specifically devoted to reuse:

"Welcome to the Reuse Web site of the California Integrated Waste Management

Board! The purpose of this Web site is to educate and motivate people to think of material reuse as the first option in diverting unwanted materials from California landfills.

"Reuse is defined as using an item over again in its current form without significant processing that alters its material structure.

"Reuse is the second step in the waste reduction hierarchy of "reduce, reuse, recycle" and plays an important role in programs to divert waste from California landfills, as required by state law."

The Waste Board defines "reuse" as "using an object or material again, either for its original purpose or for a similar purpose, without significantly altering the physical form of the object or material." The Waste Board notes that reuse of materials means those materials never become "waste": "Waste is defined as material for which no use or reuse is intended. Thus, reuse prevents objects and materials from becoming waste. Therefore, reuse is considered to be a form of waste prevention." (Tab 12) The County of Ventura actually provides a website for exchange and barter of reuse materials, including dirt, brick, broken concrete and asphalt, in order to "keep viable, resuable goods out of the landfill" (Tab 16). In addition, the County distributes flyers to encourage agricultural operations to utilize construction debris in erosion control work (Tab 16)

The definitions and explanation quoted above are the Waste Board's own definitions. Reuse materials are not waste and therefore are not regulated as waste. A recent bill, Senate Bill 1374 (Kuehl, 2002), required the Waste Board to draft a model construction and demolition (C&D) diversion ordinance, in order to assist local jurisdictions with diverting their C&D waste material. In that model ordinance, the following statement of intent was drafted by the Waste Board:

"Acknowledge that certain material types generated from certain types of projects (for example, concrete and asphalt generated from demolition projects) may already be diverted because of economic incentives, and therefore such projects are exempt from the ordinance." (Tab 13)

Nothing can be more clear. The Ventura County ordinance (4308) uses the same language. Construction material, of the exact type used in the Fishback Ranch erosion control project, is exempt from Ventura County Ordinance 4308. Based on the "Director's List of Recyclables," it is reuse material, not solid waste (Tab 18). It is not subject to the Integrated Waste Management Act, nor the County's ordinances that purport to enforce and effectuate the Waste Management Act. Fishback's work is not subject to regulation by the EHD.

As noted above, in order to effectuate the purposes of the Integrated Waste Management Act, the Waste Board promulgated regulations. Those are found at Title 14 of the California Code of Regulations. Under the regulations, certain activities are exempt from regulation.

Under Article 5.9 of the regulations (14 CCR §17380 et seq), the Fishback activities should be exempt from regulation. Section 17380(g) exempts from regulation the use of construction and demolition materials (such as the materials delivered to the Fishback Ranch), as long as those materials are incorporated into new construction:

"This article does not apply to persons who generate C&D [construction and demolition] debris or inert debris in the course of carrying out construction, remodeling, repair, demolition or deconstruction of buildings, roads and other structures, (collectively, 'construction work') at the site of the construction work or to persons who own the land, buildings and other structures that are the object of the construction work, provided that such persons do not accept at the site any C&D debris or inert debris that is generated at any other location, unless it will be used in the construction work, and provided further that such persons do not allow C&D debris or inert debris, other than C&D debris or inert debris that is used in the construction work, to remain on the site of the construction work after the construction work is completed. For example, public works agencies

constructing roads and bridges, road repair, airport runway construction, bridge and roadway work, levee work, flood control work, or landslide debris cleanup, and public or private contractors demolishing or constructing buildings are not subject to these regulations during the course of the construction work...

The Fishback erosion control activities are "construction" under that Article (see, above, e.g., levee work and flood control work) and therefore use of the demolition materials are fully exempt. In §17402.5(c)(8), the plain language of that section appears to exempt Fishback's work from regulation:

"(c) Activities included in one of the following definitions are not subject to the requirements of Articles 6.0, 6.1, 6.2, 6.3 and 6.35 of this Chapter, provided that these activities do not include the acceptance of solid waste which has not been separated for reuse. If an activity defined in this section is accepting solid waste which has not been separated for reuse, it must meet the requirements of subdivision (d) of this section or else it shall be subject to the requirements of Articles 6.0, 6.1, 6.2, 6.3 and 6.35 of this Chapter. . .

. . .

"(8) 'Reuse Salvage Operation' means a person or business entity which sterilizes, dismantles, rebuilds, or renovates, nonputrescible separated-for-reuse materials, and that recovers for recycling or reuse distinct material types that have not been commingled with other materials before they enter the waste stream.

Examples of this activity include, but are not limited to, wire choppers, and dismantlers of furniture and mattresses, and 'brown goods' such as computer equipment, VCRs, and televisions."

The materials delivered to the Fishback Ranch come directly from contractors. Most of the material is from the demolition of patios, driveways, sidewalks or swimming pool excavations, in which clean dirt, clean concrete and similar rubble is trucked off the construction site for use in

the Fishback construction. These activities are exempt from regulation by the plain language of the regulations.

In order to assist in the review of this matter, Appellants provide at Tab 14 a section-by-section analysis of the Public Resources Code, the regulations and the Ventura County ordinances. The charts show how the language in the code mirrors the regulations, and how the definitions are used.

Because the erosion control work is permitted under the HECO, and because the work is exempt from regulation under the Title 14 of the California Code of Regulations, EHD had no right to issue a cease and desist letter to the Fishbacks, and their grading must be allowed to continue.

IV. County's Mis-Interpretation of Law

Waste Management (in the Waste Management v. Palm Springs Recycling Center case cited in the previous section) relied heavily on Public Resources Code §40191. The EHD also rests its case on that same section (see page 1 of the June 6, 2006 letter to the Hearing Officer), and that reliance is similarly misplaced.

The Supreme Court's analysis of §40191 is very pertinent to this case:

"The view that all items enumerated in section 40191, subdivision (a) are waste, regardless of their value and whether they have been discarded, is further called into question by many of the types of items enumerated. For example, the statute refers to 'paper.' This can refer to all paper, however, only if the term is taken out of context and without consideration of value or the statute's stated limitation that it applies only to discarded materials. A piece of elaborate origami, a collector's autograph collection, or a watercolor painting are each indisputably paper, but we doubt anyone would seriously contend such an item is waste and that its owner cannot keep it or sell it as he sees fit. The obvious, intuitive, and correct

response to the contention would be that the property has value and that the owner has not discarded the property if he sells it. That is, the property has not become waste.

"The tension between plaintiffs and the Court of Appeal can be eliminated by relying on the distinction between selling and discarding. The Court of Appeal was correct that property does not become waste under the Act until discarded, but incorrect in suggesting (perhaps inadvertently) that the owner can discard the property as he sees fit. Discarding is governed by the Act. Selling and other methods of disposition by which the owner receives or donates the value of the recyclable materials are not discarding and are not subject to the Act.

The fundamental purpose of the [Integrated Waste Management] Act is to reduce the amount of material entering into the waste stream. The buying and selling of materials in the marketplace is inapposite to that purpose because those materials remain in circulation and do not enter into the waste stream." (7 Cal. 4th 487-488, emphasis added)

The Supreme Court's direction is echoed in the Waste Board's Model Ordinance at Tab 13, quoted above, and the Ventura County C&D Ordinance which is referenced by the Waste Board on its website. Like the bottles and cans in Palm Springs, the material placed into the construction at the Ranch (the hillside stabilization and erosion control work) is excluded from governance by the Integrated Waste Management Act. The material has <u>value</u>, is never placed into the waste stream as defined by the Act, and the material is never "discarded." As noted by the Supreme Court, the "fundamental purpose" of the Act is reduce the amount of material entering into the waste stream.

Thus, the materials utilized at the Ranch are <u>not</u> "waste" but rather reuse materials that never enter into the waste stream, and are therefore not regulated by the EHD or the Integrated Waste Management Board. By donating these materials to the Ranch, the original owners avoid

the high cost of disposal or recycling tip fees². That should be clear from the discussion in the previous section.

In its June 6, 2006 letter to the Hearing Officer, the EHD claims Fishback is disposing of "solid waste" without a permit. As noted in the *Waste Management* case and the laws and regulations cited in Section IV, the materials used on the Fishback Ranch are <u>not</u> "solid waste," nor are the materials "waste" as that term is used and defined in the Integrated Waste Management Act. The materials are <u>reuse</u> materials, and never became waste. The Waste Board's own definitions so state.

The second issue in the June 6, 2006 letter from EHD to the Hearing Officer contends the HECO permit issued by RCD is irrelevant to the enforcement of the Integrated Waste Management Act by the EHD. But it is EHD's "tunnel vision" which is causing the problem, because it is refusing to acknowledge that the inert materials used by Fishback are not "solid waste" as discussed by the Supreme Court and the various statutes and regulations quoted above.

In support of its argument that the HECO permit is irrelevant, EHD cites to the County Building Code. However, due to the use of the land (agriculture) and its topography (hillside), the RCD has jurisdiction over the Fishback Ranch. In addition, the Building Code does not apply either to isolated grading operations (3306.2(1)) or to grading taking place under a HECO plan (3306.2(10)). In the case of 3306.2(1), the isolated work had to be approved by a building official, and Ray Gutierrez was at the Fishback Ranch on a number of occasions. While a notice of violation was issued initially, it was withdraw after a review of the facts. Thereafter, Fishback obtained a HECO permit. So in either case, the erosion control and hillside stabilization work is excluded from review under the Building Code.

EHD presented its argument that HECO was irrelevant to EHD control over the Fishback

² The cost of disposing of a load of construction debris at a Ventura County dumpsite is approximately \$400.00. If the material is taken to an aggregate recycling facility, the cost is approximately \$100.00, but the recyclers will not take any dirt.

grading operation to the RCD, which responded that the HECO has "more stringent objectives" than that directed by the state's construction debris (solid waste) programs. The RCD further stated that it was "authorized to direct development of new agricultural projects in a manner that protects or improves our [agricultural] resource base." (Tab 15)

This letter from RCD was quite explicit in rejecting EHD's contention that use of demolition materials is regulated by the Act. Instead, RCD replied to EHD by stating "all fills approved under this ordinance are engineered and supervised by a California Professional Engineer or Certified Engineering Geologist along with site inspections by our engineer." In this matter, Fishback has been working with both a civil engineer and a geologist. RCD has accepted the plan prepared by these experts, and issued a permit. EHD should not be angling for more authority when the field has been covered by the HECO and RCD's oversight of the HECO.

The third issue in the EHD's June 6th letter is that the materials utilized by Fishback in the hillside stabilization and erosion control work "may not be limited" to construction and demolition waste. There is absolutely no evidence that anything other than clean fill has been used. There have been dozens of public officials up to the Ranch to inspect the operation, including Lt. Chris Long from Fish & Game and representatives from the Regional Water Quality Control Board. Bill Stratton and Diane Hall from EHD toured the Ranch as well. If anyone had evidence of "garbage" or any disallowed material on the Ranch, certainly that would be before the Hearing Board. There is no evidence of anything other than dirt, clean concrete, clean asphalt, and similar rubble. Fishback has ordered borings of the erosion control work, and the results should be available within the next few weeks.

The EHD letter contends Fishback has provided no definition of "clean fill." "Clean fill" is a generic term used to describe fully cured concrete, dirt and rubble, uncontaminated asphalt, brick and stucco. This is taken from multiple definitions in the Act and the regulations. The word "clean" is used in CIWMB publication 433-03-053 at page. 14 to describe inert solids for

reuse. Also, "fill" is defined in 14 CCR §17388(h):

"Fill' means gravel, rock, soil, sand, uncontaminated concrete, or fully cured asphalt in conjunction with a construction project or grading."

Other definitions within the Act and the regulations that contribute to an understanding of "clean fill" include "salvage" (14 CCR §17225.61); "salvaging" (14 CCR §17402(24)); "segregated from other waste material" (Pub.Res.Code §40190); "separated for reuse" (14 CCR §17381(y)); "source separated" (14 CCR §17381(dd)); "inert solids" (Pub. Res. Code §41781.2(b)); and, "separated at point of generation" (14 CCR §17381.1(a)(1)(A)). These definitions are consistent with Waste Management v. Palm Springs Recycling Center, supra: "Thus, if an owner segregates recyclable or otherwise useful materials ["reuse" materials] and sells them [donates or receives value] he or she has not discarded them and they do not become waste."

The definition of "clean fill" becomes important in the context of whether the material being delivered to the Fishback Ranch ever becomes "waste." The "fill" delivered to the Ranch separated at the source for the purpose of reuse, and therefore never entered the waste stream. Section 17388 defines such separation in separate subsections:

"Separated for Reuse' means materials, including commingled recyclables, that have been separated or kept separate from the solid waste stream for the purpose of additional sorting or processing those materials for recycling or reuse in order to return them to the economic mainstream in the form of raw material for new, reused, or reconstituted products which meet the quality standards necessary to be used in the marketplace, and includes materials that have been 'source separated.'"

And "source separated" in then defined as:

"Source Separated' means materials, including commingled recyclables, that have been separated or kept separate from the solid waste stream, at the point of generation, for the purpose of additional sorting or processing those materials for recycling or reuse in order to return them to the economic mainstream in the form of raw material for new, reused, or reconstituted products which meet the quality standards necessary to be used in the marketplace."

Such materials, separated at the source of generation for reuse purposes, do not become part of

the waste stream and are not regulated under the Integrated Waste Management Act, and therefore not subject to regulation by the EHD.

Public Resources Code §41781.2(b) defines "inert solids" as "rock, concrete, brick, sand, soil, fines, asphalt and unsorted construction and demolition waste." The next subsection of Section 41781.2, subsection (c), states that inert solids used for structural fill is <u>not</u> solid waste, because such materials have been diverted from the waste stream. Fishback has used such "inert solids" – i.e., concrete, brick and stucco – for slope stabilization, which is structural fill.

Further, grading activities utilizing source separated fill are excluded from the provisions of the Act under 14 CCR §17382:

- "(a) The following activities do not constitute CDI debris processing, inert debris processing, or chipping and grinding operations or facilities for the purposes of this Article and are not required to meet the requirements set forth herein:
- "(3) Grading or clearing of land that is consistent with local ordinances."

 The Fishback operation is "consistent with local ordinances," and in fact has a permit from RCD under the HECO.

Instead of referring to these key sections, the EHD refers to §17388(e), which defines "Disposal" as "the final deposition of C&D waste or inert debris onto land." But as we have repeatedly explained, the material placed into the Fishback erosion control and hillside stabilization work is not "waste," as it never entered the waste stream.

The EHD refuses to even acknowledge this argument, much less discuss it. Instead, in its June 6, 2006 letter to the Hearing Officer, EHD simply dismisses Ventura County Ordinance 4308 (waste reduction and waste diversion) by referencing Section 4740-3 of Ordinance 4308, and suggesting that Ordinance 4258 (which governs EHD activities) superseded Ordinance 4308. Again, EHD seems to think that it has exclusive jurisdiction over all inert materials regardless of use, reuse, whether the materials are salvaged or source separated. The proper interpretation of

these Ordinances is that Ordinance 4258 does not apply *unless* the materials are discarded and thus solid waste.

V. The County Is Singling Out The Fishback Ranch For Harsh Treatment, While Allowing Similar Operations To Proceed Without Interference

Since EHD notified Appellant that his erosion control work was a "solid waste disposal" operation, Appellant began investigating other operations in the County that were similar to his. As noted above, Ventura County Environmental and Energy Resources Division passes out information leaflets to encourage farmers to use construction debris in the type of work Fishback has done (see Tab 16).

Fishback found Muranaka Farms in Somis (SWIS#56-AA-0144). Muranaka Farms has a notification tier permit, yet there is nothing in the file maintained by EHD on Muranaka to show that a Regional Water Quality Waste Discharge Permit (or letter of exemption) has been obtained, or that a civil engineer has engineered the fill or was monitoring the grading. The file contains no record of violations, yet the Muranaka operation is using putrescibles (horse bedding and manure), which is expressly forbidden under 14 CCR §17388(k). There are lists of violations at the Muranaka site documented by Fishback, yet the County has singled out Fishback's erosion control operation for enforcement while it allows the Muranaka facility to operate without interference.

There are three other erosion control projects in Ventura County that are similar to Fishback's. They have been erroneously classified as solid waste disposal projects by EHD. The difference is Fishback's project has been classified a Registration Tier Type A Disposal Site, versus an excluded tier activity for the other sites (see Tab 17). None of these projects have been required to provide the exhaustive evidence required of Fishback.

Appellant's operation is in compliance with County ordinances and state law, but he is being harassed by EHD. In stark contrast, a bona fide solid waste disposal operation that has no engineering, no oversight, no Regional Board clearances is being ignored. The only conclusion that can be reached is that Fishback is being singled out for unfair treatment.

VI. Conclusion

For the reasons stated herein, the Hearing Officer is asked to grant the appeal of Wayne Fishback and vacate the Cease and Desist Order of the LEA.

Dated: July 17, 2006

ATE M. NEISWENDER, Attorney for

Appellant WAYNE FISHBACK

VERIFICATION

I, WAYNE FISHBACK, have reviewed the facts in Section II of this Brief. I have personal knowledge of all of the facts stated in Section II, and verify that if called upon to testify, I would testify in accordance with the facts stated herein. Also, referenced in Section II are numerous documents, which documents are included in the binder presented to the Hearing Officer. I certify that each and every one of the documents referenced in Section II and included in the binder for the Hearing Officer is a true and correct copy of the original.

I declare under penalty of perjury under the laws of the state of California that the foregoing is true and correct.

B. Wy shlute

Dated: July 17, 2006

EXHIBIT 2 PUBLIC RESOURCES CODE, SECTION 44002

PUBLIC RESOURCES CODE, DIVISION 30. WASTE MANAGEMENT PART 4. INTEGRATED WASTE MANAGEMENT CHAPTER 3. SECTION 44002

- **44002.** (a) (1) No person shall operate a solid waste facility without a solid waste facilities permit if that facility is required to have a permit pursuant to this division.
- (2) The prohibition specified in paragraph (1) includes, but is not limited to, the operation of a solid waste facility without a required solid waste facilities permit or the operation of a solid waste facility outside the permitted boundaries specified in a solid waste facilities permit.
- (b) If the enforcement agency determines that a person is operating a solid waste facility in violation of subdivision (a), the enforcement agency shall immediately issue a cease and desist order pursuant to Section 45005 ordering the facility to immediately cease all activities for which a solid waste facilities permit is required and desist from those activities until the person obtains a valid solid waste facilities permit authorizing the activities or has obtained other authorization pursuant to this division.

EXHIBIT 3 CALIFORNIA CODE OF REGULATIONS, TITLE 14, ARTICLE 5.95, SECTION 17387 - SECTION 17390



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14 CA ADC § 17387

14 CCR s 17387

Cal. Admin. Code tit. 14, s 17387

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- s 17387. Authority and Scope.
- (a) Article 5.95 sets forth permitting requirements, tier requirements, and minimum operating standards for operations and facilities that dispose construction and demolition (C&D) waste and inert debris. This Article is not applicable to operations and facilities that are wholly governed in regulations elsewhere in this Chapter or Title 27.
- (b) This Article is adopted pursuant to and for the purpose of implementing the California Integrated Waste Management Act of 1989 (Act) commencing with Section 40000 of the Public Resources Code (PRC), as amended. These regulations should be read together with the Act.
- (c) Nothing in this Article limits or restricts the power of any Federal, State, or local agency to enforce any provision of law that it is authorized or required to enforce or administer, nor to limit or restrict local governments from promulgating laws which are as strict or stricter than the regulations contained in this Article. However, no local government may promulgate laws which are inconsistent with the provisions of this Article.
- (d) No provision in this Article shall be construed as relieving any owner or operator from obtaining all required permits, licenses, or other clearances and complying with all orders, laws, regulations, reports, or other requirements of other regulatory or enforcement agencies, including, but not limited to, local health agencies, Regional Water Quality Control Boards, Department of Toxic Substances Control, air quality management districts or air pollution control districts, local land use authorities, and fire authorities.

Note: Authority cited: Sections 40502, 43020, 43021 and 48007.5, Public Resources Code. Reference: Sections 40053, 43020, 43021 and 48007.5, Public Resources Code.

HISTORY

- 1. New article 5.95 (sections 17387-17390) and section filed 12-26-2003; operative 2-24-2004 (Register 2003, No. 52).
- Editorial correction of History 1 (Register 2004, No. 2).
 14 CA ADC s 17387

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14 CCR s 17387.5

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s 17387.5. Purpose.

- (a) The purpose of this Article is to promote the health, safety and welfare of the people of the State of California, and to protect the environment by establishing minimum standards for the handling and disposal of C&D waste and inert debris at disposal sites.
- (b) By adopting these standards, the board hereby sets forth performance standards for disposal sites which dispose C&D waste and inert debris and which are of State concern, as required by PRC sections 43020 and 43021, and sets forth minimum substantive requirements for operator's submission of information concerning individual disposal sites.

Note: Authority cited: Sections 40502, 43020, 43021 and 48007.5, Public Resources Code. Reference: Sections 40053, 43020, 43021 and 48007.5, Public Resources Code.

HISTORY

- 1. New section filed 12-26-2003; operative 2-24-2004 (Register 2003, No. 52).
- 2. Editorial correction of History 1 (Register 2004, No. 2). 14 CA ADC s 17387.5

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s 17388. Definitions.

For the purposes of this Article, the following definitions shall apply. Additional definitions that apply to this Article are found at California Code of Regulations (CCR), Title 14, Division 7, Chapter 3, Article 6, sections 17402 and 17402.5, and Article 4, section 17225 and Title 27, Division 2, Chapter 2, Articles 1, and 2.

- (a) "C&D" means construction and demolition, as in the term "C&D waste".
- (b) "CDI" means any combination of construction and demolition waste and inert debris.
- (c) "Construction and Demolition Waste" or "C&D Waste" means the nonhazardous waste building materials, packaging and rubble resulting from construction, remodeling, repair and demolition operations on pavements, houses, commercial buildings and other structures.
- (d) "CDI Waste Disposal Facility" means a facility at which C&D waste, C&D waste together with inert debris (Type A or B) or inert debris (Type B) only is disposed.
- (e) "Disposal" means the final deposition of C&D waste or inert debris onto land.
- (f) "EA" means enforcement agency as defined in PRC section 40130.
- (g) "Engineered Fill Activity" means fill that has been designed by an engineer to act as a structural element of a constructed work and has been placed under engineering inspection, usually with density testing. An engineered fill activity shall meet specifications prepared and certified for a specific project by a Civil Engineer, Certified Engineering Geologist, or similar professional licensed by the State of California, and includes requirements for placement, geometry, material, compaction and quality control.
- (h) "Fill" means gravel, rock, soil, sand, uncontaminated concrete, or fully cured asphalt in conjunction with a construction project or grading.
- (i) "Fully Cured Asphalt" means that the material must be at ambient temperature, be substantially hardened and be inelastic.
- (j) "Grading" means any land excavation, filling, earth moving or combination thereof.
- (k) "Inert Debris" means solid waste and recyclable materials that are source separated or separated for reuse and do not contain hazardous waste (as defined in CCR, Title 22, section 66261.3 et. seq.) or soluble pollutants at concentrations in excess of applicable water quality. Inert debris may not contain any putrescible wastes. Gravel, rock, soil, sand and similar materials whether processed or not, that have never been used in connection with any structure, development, grading or other similar human purpose, or that

are uncontaminated, are not inert debris. Such materials may be commingled with inert debris.

- (1) "Type A inert debris" includes but is not limited to concrete (including fiberglass or steel reinforcing bar embedded in the concrete), fully cured asphalt, crushed glass, fiberglass, asphalt or fiberglass roofing shingles, brick, slag, ceramics, plaster, clay and clay products. Type A inert debris is waste that does not contain soluble pollutants at concentrations in excess of water quality objectives and has not been treated in order to reduce such pollutants. The board, upon consultation with the State Water Resources Control Board, will determine on a case by case basis whether materials not listed in this subdivision qualify as Type A inert debris. The board and the State Water Resources Control Board may consider statewide and site-specific factors in making this determination.
- (2) "Type B inert debris" is solid waste that is specifically determined to be inert by the applicable RWQCB, such as treated industrial wastes and de-watered bentonite-based drilling mud, but excluding Type A inert debris.
- (I) "Inert Debris Engineered Fill Operation" means an activity exceeding one year in duration in which only the following inert debris may be used: fully cured asphalt, uncontaminated concrete (including steel reinforcing rods embedded in the concrete), crushed glass, brick, ceramics, clay and clay products, which may be mixed with rock and soil. Those materials are spread on land in lifts and compacted under controlled conditions to achieve a uniform and dense mass which is capable of supporting structural loading, as necessary, or supporting other uses such as recreation, agriculture and open space in order to provide land that is appropriate for an end use consistent with approved local general and specific plans (e.g., roads, building sites, or other improvements) where an engineered fill is required to facilitate productive use(s) of the land. Filling above the surrounding grade shall only be allowed upon the approval of all governmental agencies having jurisdiction. The engineered fill shall be constructed and compacted in accordance with all applicable laws and ordinances and in accordance with specifications prepared and certified at least annually by a Civil Engineer, Certified Engineering Geologist, or similar professional licensed by the State of California and maintained in the operating record of the operation. The operator shall also certify under penalty of perjury, at least annually, that only approved inert debris has been placed as engineered fill, and specifying the amount of inert debris placed as fill. These determinations may be made by reviewing the records of an operation or by on-site inspection. Certification documents shall be maintained in the operating records of the operation and shall be made available to the EA during normal business hours. Acceptance of other Type A inert debris or shredded tires pursuant to Waste Discharge Requirements prior to the effective date of this Article does not preclude an activity from being deemed an inert debris engineered fill operation, provided that the operation meets all the requirements of this Article once it takes effect. Where such materials have been deposited, the operator must specify in the operation plan the type of waste previously accepted, a diagram of the fill area, and estimations of the depth of the fill material previously accepted. Inert debris placed in an Inert Debris Engineered Fill Operation is not counted as diversion or disposal for a given jurisdiction.
- (m) "Inert Debris Type A Disposal Facility" means a site where only Type A inert debris is disposed to land. Inert debris Type A disposal facilities do not include inert debris engineered fill operations.
- (n) "Landslide Debris", for the purposes of this Article, means the soil or rock or other natural material deposited on roadways, bridge decks, flood control facilities, or other structures resulting from a naturally-occurring mass movement of earth or rocks from a mountain, hill, cliff, or road cut.
- (o) "Operating Record" means a readily accessible collection of records of an operation's or facility's activities in compliance with required State Minimum Standards under Title 14 and Title 27. The operating record shall include the operation plan for inert debris engineered fill operations, or the disposal facility plan or disposal facility report for facilities, and shall contain, but is not limited to: agency approvals, tonnage and load checking records, hours of operation, owner/operator contacts, and personnel training history. The record may be reviewed by State and local authorities and shall be made available during normal business hours. The records may be maintained at any location that is easily accessible to the EA.
- (p) "Putrescible Wastes" means solid wastes that are capable of being decomposed by micro-organisms with sufficient rapidity as to cause nuisances because of odors, vectors, gases or other offensive conditions, and include materials such as, but not limited to food wastes, offal and dead animals. The EA shall determine on a case-by-case basis whether or not a site is handling putrescible wastes.
- (q) "RDSI" means Report of Disposal Site Information as described in CCR, Title 27, section 21600.

- (r) "RWQCB" means Regional Water Quality Control Board.
- (s) "Separated for Reuse" means materials, including commingled recyclables, that have been separated or kept separate from the solid waste stream for the purpose of additional sorting or processing of those materials for recycling or reuse in order to return them to the economic mainstream in the form of raw material for new, reused, or reconstituted products which meet the quality standards necessary to be used in the marketplace, and includes materials that have been "source separated".
- (t) "Site" means the area where the handling of solid waste, and/or recyclable materials occurs at an operation or facility subject to this Article.
- (u) "Solid waste" means the same as in PRC section 40191.
- (v) "Source Separated" means materials, including commingled recyclables, that have been separated or kept separate from the solid waste stream, at the point of generation, for the purpose of additional sorting or processing those materials for recycling or reuse in order to return them to the economic mainstream in the form of raw material for new, reused, or reconstituted products which meet the quality standards necessary to be used in the marketplace.
- (w) "Vector" means any insect or other arthropod, rodent, or other animal capable of transmitting the causative agents of human disease.

Note: Authority cited: Sections 40502, 43020, 43021 and 48007.5, Public Resources Code. Reference: Sections 40053, 43020, 43021 and 48007.5, Public Resources Code.

HISTORY

- New section filed 12-26-2003; operative 2-24-2004 (Register 2003, No. 52).
- Editorial correction of History 1 (Register 2004, No. 2).
 14 CA ADC s 17388

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s 17388.1. Regulatory Tiers Placement for CDI Waste and Inert Debris Disposal Operations and Facilities.

Construction & Demolition and Inert Debris Tier Placement

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Image 1 (4" X 4.25") Not available for Offline Print to STP or FAX

Excluded Operations Tier	EA		Full Solid Waste Facility	
Section 17388.2	Notification	Registration	Permit	
Inert Debris	Inert Debris	Inert Debris	CDI Waste	
Engineered Fill	Engineered	Type A	Disposal	
activity which	Fill	Disposal	Facility	D
concludes	Operations	Facility	Section	I
within	Section	Section	17388.5	S
one year	17388.3	17388.4		P
				0
Removal and				S
disposal of				A
landslide debris				L
Removal and				
disposal of				
sediment			•	
accumulated				
within irrigation				
or flood control				
facilities				
Road building,				
road repair, etc.				
Clean closed		4		
CDI waste disposal				

Note: Authority cited: Sections 40502, 43020, 43021 and 48007.5, Public Resources Code. Reference: Sections 40053, 43020, 43021 and 48007.5, Public Resources Code.

HISTORY

- 1. New section filed 12-26-2003; operative 2-24-2004 (Register 2003, No. 52).
- 2. Editorial correction ofHistory 1 (Register 2004, No. 2).
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- s 17388.2. Excluded Activities.
- (a) The following disposal activities do not constitute C&D waste or inert debris operations or facilities for the purposes of this Article and are not required to meet the requirements set forth herein:
- (1) Any use (e.g., grading) of gravel, rock, soil, sand and similar, whether processed or not, that has never been used in connection with any structure, road, parking lot, or similar use.
- (2) Engineered fill activities which have local permits as required, and are carried out in conjunction with a construction project (e.g., building and other construction, bridge and roadway work, development of pathways or riding trails, etc), and which use uncontaminated concrete and/or fully cured asphalt which has been reduced in particle size to 2"or less as part of a recycling activity and concludes within two years from commencement.
- (3) Inert debris engineered fill activities which conclude within one year of commencement and that meet all requirements of section 17388.3 of this Article, except subsections (b) inspections, (c) Plan, (d) State Minimum Standards, (g) final cover, (h) scales and submittal of EA Notification.
- (4) Removal and disposal of landslide debris containing no C&D waste by Federal, State and local government public works agencies and their contractors, provided that the material removed from such sites is disposed in accordance with applicable law.
- (5) Removal and disposal of sediment which has accumulated within irrigation or flood control facilities and which contains no solid waste, by Federal, State and local government public works agencies and their contractors, provided that the material removed from such sites is disposed or otherwise handled in accordance with applicable law.
- (6) The use of fully cured asphalt, uncontaminated concrete (including steel reinforcing rods embedded in the concrete), crushed glass, brick, ceramics, clay and clay products, which may be mixed with rock and soil, in connection with road building, road repair, airport runway construction, bridge and roadway work, levee work, flood control work, and all associated activities by Federal, State and local government public works agencies and their contractors.
- (7) Existing C&D waste or inert debris disposal sites from which all waste and debris have been removed (clean closure) within one year after February 24, 2004, provided that the material removed from such sites is disposed in accordance with applicable law. The board may extend the time for clean closure by up to one year upon the applicant's showing of good cause for such extension.
- (b) Nothing in this section precludes the EA or the board from inspecting an excluded activity to verify that the activity is being conducted in a manner that qualifies as an excluded activity, or from taking any

appropriate enforcement action, including the use of a Notice and Order. The burden of proof shall be on the owner or operator to demonstrate that the activity is excluded pursuant to this section.

Note: Authority cited: Sections 40502, 43020, 43021 and 48007.5, Public Resources Code. Reference: Sections 40053, 43020, 43021 and 48007.5, Public Resources Code.

HISTORY

- New section filed 12-26-2003; operative 2-24-2004 (Register 2003, No. 52).
- 2. Editorial correction ofHistory 1 (Register 2004, No. 2).
 14 CA ADC s 17388.2

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DIVISION 7. CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD
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This database is current through 05/26/06, Register 2006, No. 21.

s 17388.3. Inert Debris Engineered Fill Operations.

Inert debris engineered fill operations shall submit EA Notifications, as set forth in CCR, Title 14, section 18100 et seq. and shall comply with all applicable RWQCB waste discharge requirements.

- (a) Each operator of an inert debris engineered fill operation shall submit a copy of its waste discharge requirements or a letter of exemption from the applicable RWQCB to the EA together with its notification of intent to operate.
- (b) Inert debris engineered fill operations shall be inspected as necessary by the EA to verify compliance with State Minimum Standards. Inspections shall be conducted quarterly, unless the EA determines a lesser frequency is sufficient, but in no case shall the inspection frequency be less than annual. To the greatest extent possible, all inspections shall be unannounced and shall be conducted at irregular intervals.
- (c) Each operator of an inert debris engineered fill operation shall file an "Operation Plan" (as specified in this Article, section 17390) with the EA together with its notification of intent to operate. The information contained in the Plan shall be reviewed by the EA to determine whether it is complete and correct as defined in CCR, Title 14, section 18101.
- (d) All inert debris engineered fill operations shall comply with the State Minimum Standards set forth in Title 27 CCR, Division 2, Chapter 3.0, Subchapter 4, Article 1 (Operating Criteria), and Article 3 (Handling, Equipment and Maintenance), and Article 4 (Controls) (except sections 20515, 20640, 20880, and 20890).
- (e) By March 1 of each year, the operator shall report to the EA and the board the total amount of inert debris deposited during the previous year. However, the operator is not subject to the disposal reporting record requirements of Title 14 CCR, Division 7, Chapter 9, Article 9.2 or the disposal fee specified in PRC Section 48000 and Revenue and Taxation Code Section 45151.
- (f) All inert debris engineered fill operations, upon completion or cessation of fill activities for more than one year and upon any transfer of any part of the land subject to the operation prior to completion of fill activities, shall comply with the requirements in Title 27, Subsections 21170(a)(1,2 and, if applicable, 3).
- (g) Upon the final placement of waste at the site, the operator shall cover the site of fill with three feet of compacted soil above the fill area or with other final cover as determined by the EA. The EA may determine, on the basis of substantial evidence, that a lesser amount of final cover or no final cover is needed, based on potential impacts to the public health, safety and the environment.
- (h) If an inert debris engineered fill operation exceeds any combination of the following requirements three (3) or more times within any two (2) year period which the EA determines constitutes a violation of this Article, the facility no longer qualifies for an EA Notification under this section. Upon the third such violation,

the EA shall notify the operator in writing that the facility no longer qualifies for an EA Notification, and the operator must within 30 days apply for a Full Permit as if it were a CDI Waste Disposal Facility pursuant to Section 17388.5. In addition, the EA shall issue a cease and desist order pursuant to Section 18304 directing, among other things, that the operator immediately cease accepting material at the site until the operator has demonstrated to the EA that it has corrected the violation and eliminated the cause of the violation. Notwithstanding, the EA may at any time take any additional enforcement action the EA deems appropriate.

The requirements to which this subdivision applies are:

- 1. Disposal of any wastes not authorized by subsection 17388(I);
- 2. Failure to comply with the requirements for certification by an engineer specified in subsection 17388(I);
- 3. Failure to comply with requirements for operator certification of materials disposed in the fill as required in subsection 17388(i).
- (i) Inert debris engineered fill operations are not required to meet the notification requirements of this Article if the operation is occurring at a disposal facility that has a full solid waste facilities permit and the permit authorizes the activity either through a specific condition in the permit or as described and approved in the Report of Disposal Site Information.

Note: Authority cited: Sections 40502, 43020, 43021 and 48007.5, Public Resources Code. Reference: Sections 40053, 43020, 43021 and 48007.5, Public Resources Code.

HISTORY

- New section filed 12-26-2003; operative 2-24-2004 (Register 2003, No. 52).
- Editorial correction of History 1 (Register 2004, No. 2).
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s 17388.4. Inert Debris Type A Disposal Facilities.

Inert debris Type A disposal facilities shall obtain Registration Permits and shall comply with the Registration Permit requirements as set forth in CCR, Title 14, Division 7, Chapter 5.0, Article 3.0 (commencing at section 18100), with the following requirements set out in CCR, Title 27, Division 2, Chapter 4, Subchapter 3, Article 2 (commencing at section 21570) in the same manner as if they were municipal solid waste landfills, CCR, Title 14, Division 7, Chapter 9, and with all RWQCB waste discharge requirements.

- (a) Each operator of an inert debris Type A disposal facility shall submit a copy of its waste discharge requirements or a letter of exemption from the applicable RWQCB to the EA together with its application for a Registration Permit.
- (b) Inert debris Type A disposal facilities shall be inspected monthly by the EA in accordance with PRC 43218. To the greatest extent possible, all inspections shall be unannounced and shall be conducted at irregular intervals.
- (c) Each operator shall file with the EA, together with its application for a solid waste facilities permit, a Disposal Facility Plan (as more fully described in Chapter 5, Article 3.2, section 18223.6).
- (d) Each operator must comply with the closure and postclosure maintenance requirements of Title 27, CCR, Division 2, Subchapter 5, Article 2 (commencing with section 21099).
- (e) Each operator must comply with the financial assurance requirements for closure and postclosure maintenance, operating liability and corrective action set forth in Title 27 CCR, Division 2, Chapter 6 (commencing at section 22200).
- (f) The EA shall comply with the Enforcement Agency Requirements of Title 27 CCR, Division 2, Chapter 4, Subchapter 3, Article 3, commencing with section 21650.
- (g) Inert debris Type A disposal facilities shall maintain disposal reporting records and comply with the requirements set forth in Title 14 CCR, Division 7, Chapter 9, Article 9.2 (Disposal Reporting System), commencing at section 18800.
- (h) Inert debris Type A disposal facilities shall comply with the State Minimum Standards set forth in Title 27 CCR, Division 2, Chapter 3.0, Subchapter 4, Articles 1 (Operating Criteria), Article 3 (Handling, Equipment and Maintenance), and Article 4 (Controls) (except sections 20880 and 20890).
- (i) Each operator shall determine the weight of all material received at the facility for disposal and shall maintain records of the weight of materials as required herein. Until February 24, 2005, weight of material shall be determined by a conversion factor authorized by the EA for each waste type received. After that

date, weight shall be determined by the use of scales, which may be located at the operation or off-site. Notwithstanding, operations in a rural city or a rural county, as defined in PRC sections 40183 and 40184, and operations that will cease activities within three years from February 24, 2004, as reflected in their Operation Plan may determine the weight of materials received by use of conversion factors authorized by the EA for each waste type or combination thereof received. Evidence of the accuracy of the conversion factors shall be provided to the EA annually.

(j) If an inert debris Type A disposal facility accepts for disposal any waste not authorized by, or pursuant to, Subsection 17388(k)(1) three (3) or more times within any two (2) year period which the EA determines constitutes a violation of this Article, the facility no longer qualifies for a Registration Permit under this section. Upon the third such violation, the EA shall notify the operator in writing that the facility no longer qualifies for a Registration Permit, and the operator must within 30 days apply for a Full Permit as if it were a CDI Waste Disposal Facility pursuant to Section 17388.5. In addition, the EA shall issue a cease and desist order pursuant to Section 18304 directing, among other things, that the operator immediately cease accepting material at the site until the operator has demonstrated to the EA that it has corrected the violation and eliminated the cause of the violation. Notwithstanding, the EA may at any time take any additional enforcement action the EA deems appropriate.

Note: Authority cited: Sections 40502, 43020, 43021 and 48007.5, Public Resources Code. Reference: Sections 40053, 43020, 43021 and 48007.5, Public Resources Code.

HISTORY

- 1. New section filed 12-26-2003; operative 2-24-2004 (Register 2003, No. 52).
- 2. Editorial correction of History 1 (Register 2004, No. 2). 14 CA ADC s 17388.4

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s 17388.5. CDI Waste Disposal Facilities.

CDI waste disposal facilities shall obtain full solid waste facilities permits and shall comply with all requirements promulgated by the board as set forth in CCR, Title 27, Division 2 in the same manner as if they were municipal solid waste landfill units.

- (a) CDI waste disposal facilities shall maintain disposal reporting records and shall comply with the requirements set forth in Title 14 CCR, Division 7, Chapter 9, Article 9.2 (Disposal Reporting System), commencing at section 18800.
- (b) Each operator shall determine the weight of all material received at the facility for disposal and shall maintain records of the weight of materials as required herein. Until February 24, 2005, weight of material shall be determined by a conversion factor authorized by the EA for each waste type received. After that date, weight shall be determined by the use of scales, which may be located at the operation or off-site. Notwithstanding, operations in a rural city or a rural county, as defined in PRC sections 40183 and 40184. and operations that will cease activities within three years from February 24, 2004, as reflected in their Operation Plan may determine the weight of materials received by use of conversion factors authorized by the EA for each waste type or combination thereof received. Evidence of the accuracy of the conversion factors shall be provided to the EA annually.
- (c) To the greatest extent possible, all site inspections shall be unannounced and shall be conducted at irregular intervals.

Note: Authority cited: Sections 40502, 43020, 43021 and 48007.5, Public Resources Code. Reference: Sections 40053, 43020, 43021 and 48007.5, Public Resources Code.

HISTORY

- 1. New section filed 12-26-2003; operative 2-24-2004 (Register 2003, No. 52).
- 2. Editorial correction of History 1 (Register 2004, No. 2).

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- s 17388.6. Public Hearing.
- (a) Provided that a comparable public hearing has not been held within the year preceding the EA's receipt of a complete and correct application, the EA shall hold an informational public hearing on an application for a Registration Permit or a Full Permit required under this Article. The EA may require the operator(s) of the facility or facilities that are the subject of the hearing to pay all costs incurred by the EA in connection with the hearing. The hearing may be combined with another hearing in which the EA participates that meets the criteria in this section. In the case of an application for a Full Permit, the hearing shall be held before the EA submits the proposed permit to the board for concurrence. In the case of an application for a Registration Permit, the hearing shall be held before the EA issues the permit. The EA shall submit to the board a statement that the hearing required by this section was held, in the case of a Full Permit, at the time the EA submits the proposed permit to the board for concurrence, or, in the case of a Registration Permit, at the time the EA submits a copy of the permit it has issued.
- (b) The hearing shall meet the following criteria:
- 1. Notice of the hearing shall be given pursuant to Government Code Section 65091, subdivisions (a)-(c), inclusive.
- 2. Notice of the hearing shall also be given to the governing body of the jurisdiction within which the facility is located and to the State Assembly Member and the State Senator in whose districts the facility is located.
- 3. The hearing shall be held in a suitable location not more than five (5) miles from the facility that is the subject of the hearing; provided that, if no suitable location exists within five (5) miles of the facility, as determined by the EA, the EA may designate an alternative suitable location that is as close to the facility as reasonably practical.
- 4. The hearing shall be held on a day and at a time that the EA determines will enable attendance by residents living in the vicinity of the facility that is the subject of the hearing.
- (c) EAs may undertake additional measures to extend public notice and to encourage attendance by any persons who may be interested in the facility that is the subject of the hearing.

Note: Authority cited: Sections 40502, 43020, 43021 and 48007.5, Public Resources Code. Reference: Sections 40053, 43020, 43021 and 48007.5, Public Resources Code.

HISTORY

1. New section filed 12-26-2003; operative 2-24-2004 (Register 2003, No.

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s 17389. Record Keeping Requirements for Operations.

All operations shall meet the following requirements:

- (a) All records required by this Article shall be maintained in a single accessible location for at least three (3) years and shall be available for inspection by authorized representatives of the board, EA, local health agency, and other duly authorized regulatory and enforcement agencies during normal working hours.
- (b) The operator shall maintain a daily log book or file describing special occurrences and methods used to resolve problems arising from these events, including details of all incidents requiring the implementation of emergency procedures. Special occurrences shall include, but are not limited to: receipt or rejection of prohibited wastes, fires, accidents, injury and property damage, flooding, earthquake damage and other unusual occurrences. The operator shall notify the EA by telephone within 24 hours of all incidents requiring the implementation of emergency procedures, unless the EA determines that a less immediate form of notification will be sufficient to protect public health and safety and the environment.
- (c) The operator shall document any written and oral complaints received from the public, including the nature of the complaint, the date the complaint was received, the name, address, and telephone number of the person or persons making the complaint (if available), and any actions taken to respond to the complaint.
- (d) The operator shall maintain an operating record which shall include, among other things, records of incoming weights or volumes and outgoing salvage or residual weights or volumes shall be kept in a form or manner approved by the EA. Such records shall be adequate for overall planning and control purposes, and be as current and accurate as practicable. These records shall be provided to the EA or the board upon request.
- (e) The operator shall record the number of load checks performed and loads rejected.
- (f) The operator shall maintain a copy of the written notice to the EA and local health agency specifying the names, addresses, and telephone numbers of the operator or other persons responsible for the operation.
- (g) The operator shall maintain records of employee training.
- (h) If gas monitoring is conducted at the operation, the operator shall maintain records of all gas monitoring as available and as required.
- (i) If water monitoring is conducted at the operation, the operator shall maintain records of all water monitoring as available and appropriate as required.

[Note: Record-keeping requirements for facilities subject to this Article are found at and Title 27, Division 2,

Chapter 3, Article 1, section 20510.]

Note: Authority cited: Sections 40502, 43020, 43021 and 48007.5, Public Resources Code. Reference: Sections 40053, 43020, 43021 and 48007.5, Public Resources Code.

HISTORY

- New section filed 12-26-2003; operative 2-24-2004 (Register 2003, No. 52).
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s 17390. Operation Plan.

Each operator of an Inert Debris Engineered Fill Operation, together with its notification of intent to operate filed pursuant to section 17388.3 of this Article, shall file with the EA an Operation Plan. The operator must file amendments as necessary to maintain the accuracy of the Plan. A Plan shall contain the following:

- (a) Name(s) of the operator, owner, and the company they represent, if applicable;
- (b) Scaled schematic drawing of the buildings and other structures showing layout and general dimensions of the operations area, including but not limited to, unloading, storage, loading, and parking areas;
- (c) Descriptive statement of the manner in which activities are to be conducted at the operation;
- (d) Days and hours of operation. If the hours of waste receipt differ from the hours of material processing, each schedule may be stated. For facilities with continuous operations, indicate the start of the operating day for the purpose of calculating the amount of waste received per operating day. The operator may also indicate whether or not, and when, other activities such as routine maintenance will take place, if those activities will occur at times other than those indicated above;
- (e) Total acreage contained within the operating or fill areas;
- (f) Design capacity, including the assumptions, methods, and calculations performed to determine the total capacity;
- (g) Information indicating the types and daily quantities of waste or debris to be received. If tonnage is determined from records of cubic yardage, include the conversion factor used in the calculation:
- (h) Description of methods used by the operation to comply with each State Minimum Standard;
- (i) Anticipated volume of quench or process water and the planned method of treatment and disposal of any wastewater;
- (j) Description of provisions to handle unusual peak loading;
- (k) Description of transfer, recovery and processing equipment, including classification, capacity and the number of units.
- (I) Planned method for final placement of the solid waste;
- (m) Planned method for the storage and removal of salvaged material.

- (n) Resume of management organization that will operate the site.
- (o) A description of road building and seasonal tipping pad design.
- (p) A description of a program to prevent the acceptance of unapproved materials and hazardous wastes.
- (q) A description of the planned method for storage and removal of prohibited wastes.
- (r) A general description of the proposed final productive use(s), if any, of the fill area. The description shall specify generally what area(s) within the boundaries of the operation will be capable of supporting a structure upon closure.
- (s) The compaction standards for density and design, if any.
- (t) A copy of the operator's Injury and Illness Prevention Plan (as applicable under current law).

Note: Authority cited: Sections 40502, 43020, 43021 and 48007.5, Public Resources Code. Reference: Sections 40053, 43020, 43021 and 48007.5, Public Resources Code.

HISTORY

- New section filed 12-26-2003; operative 2-24-2004 (Register 2003, No. 52).
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EXHIBIT 4 PUBLIC RESOURCES CODE, DIVISION 30.
WASTE MANAGEMENT,
PART 1. INTEGRATED WASTE MANAGEMENT,
CHAPTER 1. DEFINITIONS

PUBLIC RESOURCES CODE SECTION 40100-40201

40100. Unless the context otherwise requires, the definitions in this article govern the construction of this division.

40105. "Authorized recycling agent" means a person that a local governing body or private commercial entity authorizes or contracts with to collect its recyclable waste material. An authorized recycling agency may be a municipal collection service, private refuse hauler, private recycling enterprise, or private nonprofit corporation or association.

40106. (a) "Biomass conversion" means the controlled combustion, when separated from other solid waste and used for producing electricity or heat, of the following materials:

- (1) Agricultural crop residues.
- (2) Bark, lawn, yard, and garden clippings.
- (3) Leaves, silvicultural residue, and tree and brush pruning.
- (4) Wood, wood chips, and wood waste.
- (5) Nonrecyclable pulp or nonrecyclable paper materials.
- (b) "Biomass conversion" does not include the controlled combustion of recyclable pulp or recyclable paper materials, or materials that contain sewage sludge, industrial sludge, medical waste, hazardous waste, or either high-level or low-level radioactive waste.
- (c) For purposes of this section, "nonrecyclable pulp or nonrecyclable paper materials" means either of the following, as determined by the board:
- (1) Paper products or fibrous materials that cannot be technically, feasibly, or legally recycled because of the manner in which the product or material has been manufactured, treated, coated, or constructed.
- (2) Paper products or fibrous materials that have become soiled or contaminated and as a result cannot be technically, feasibly, or legally recycled.
- 40110. "Board" means the California Integrated Waste Management Board.
- 40115. "City" or "county" includes city and county.
- 40116. "Compost" means the product resulting from the controlled biological decomposition of organic wastes that are source separated from the municipal solid waste stream, or which are separated at a centralized facility. "Compost" includes vegetable, yard, and wood wastes which are not hazardous waste.

- 40117. "Gasification" means a technology that uses a noncombustion thermal process to convert solid waste to a clean burning fuel for the purpose of generating electricity, and that, at minimum, meets all of the following criteria:
- (a) The technology does not use air or oxygen in the conversion process, except ambient air to maintain temperature control.
- (b) The technology produces no discharges of air contaminants or emissions, including greenhouse gases, as defined in subdivision (g) of Section 42801.1 of the Health and Safety Code.
- (c) The technology produces no discharges to surface or groundwaters of the state.
 - (d) The technology produces no hazardous waste.
- (e) To the maximum extent feasible, the technology removes all recyclable materials and marketable green waste compostable materials from the solid waste stream prior to the conversion process and the owner or operator of the facility certifies that those materials will be recycled or composted.
- (f) The facility where the technology is used is in compliance with all applicable laws, regulations, and ordinances.
- (g) The facility certifies to the board that any local agency sending solid waste to the facility is in compliance with this division and has reduced, recycled, or composted solid waste to the maximum extent feasible, and the board makes a finding that the local agency has diverted at least 30 percent of all solid waste through source reduction, recycling, and composting.
- 40120. "Designated recycling collection location" means the place where an authorized recycling agent has contracted with either the local governing body or a private entity to pick up recyclable material segregated from other waste material. "Designated recycling collection location" includes, but is not limited to, the curbside of a residential neighborhood or the service alley of a commercial enterprise.
- 40120.1. "Disposal" has the same meaning as "solid waste disposal" as defined in Section 40192.
- 40121. "Disposal facility" or "facility" means any facility or location where disposal of solid waste occurs.
- 40122. "Disposal site" or "site" includes the place, location, tract of land, area, or premises in use, intended to be used, or which has been used, for the landfill disposal of solid wastes. "Disposal site" includes solid waste landfill, as defined in Section 40195.1.
- 40123. "Disposal site owner" means the person who holds title to the property used as a disposal site after January 1, 1977.
- 40124. "Diversion" means activities which reduce or eliminate the

amount of solid waste from solid waste disposal for purposes of this division, including Article 1 (commencing with Section 41780) of Chapter 6.

- 40130. "Enforcement agency" means the local agency designated pursuant to Article 1 (commencing with Section 43200) of Chapter 2 of Part 4 for the purpose of carrying out this division, or the board if no designation of a local agency has been approved by the board.
- 40131. "Enforcement program" means the regulations and procedures adopted by the board pursuant to Chapter 2 (commencing with Section 43200) of Part 4.
- 40131.5. "Federal act" means the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. Sec. 6901 et seq.).
- 40135. "Fund" means the Integrated Waste Management Fund, which is hereby created in the State Treasury. Any reference in this division or any other provision of law to the Solid Waste Management Fund shall mean the Integrated Waste Management Fund.
- 40135.1. "Account" means the Integrated Waste Management Account created in the fund pursuant to Section 48001.
- 40140. "Hazard" includes any condition, practice, or procedure which is or may be dangerous, harmful, or perilous to employees, property, neighbors, or the general public.
- 40141. (a) "Hazardous waste" means a waste, or combination of wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may do either of the following:
- (1) Cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness.
- (2) Pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported, or disposed of, or otherwise managed.
- (b) Unless expressly provided otherwise, "hazardous waste" includes extremely hazardous waste and acutely hazardous waste.
- 40148. "Large state facility" means those campuses of the California State University and the California Community Colleges, prisons within the Department of Corrections, facilities of the State Department of Transportation, and facilities of other state agencies, that the board determines, are primary campuses, prisons,

or facilities.

- 40150. "Local governing body" means the legislative body of the city, county, or special district which has authority to provide solid waste handling services.
- 40151. "Nondisposal facility" means any solid waste facility required to obtain a permit pursuant to Article 1 (commencing with Section 44001) of Chapter 3 of Part 4, except a disposal facility or a transformation facility.
- 40160. "Operator" means the person to whom the approval to operate a disposal site, transfer or processing station, or collection system is granted.
- 40170. "Person" includes an individual, firm, limited liability company, association, partnership, political subdivision, government agency, municipality, industry, public or private corporation, or any other entity whatsoever.
- 40171. "Pollution" means the condition caused by the presence in or on a body of water, soil, or air of any solid waste or substance derived therefrom in such quantity, of such nature and duration, or under such condition that the quality, appearance, or usefulness of the water, soil, land, or air is significantly degraded or adversely altered.
- 40172. "Processing" means the reduction, separation, recovery, conversion, or recycling of solid waste.
- 40180. "Recycle" or "recycling" means the process of collecting, sorting, cleansing, treating, and reconstituting materials that would otherwise become solid waste, and returning them to the economic mainstream in the form of raw material for new, reused, or reconstituted products which meet the quality standards necessary to be used in the marketplace. "Recycling" does not include transformation, as defined in Section 40201.
- 40181. "Regional agency" means an agency formed pursuant to Chapter 5 (commencing with Section 6500) of Division 7 of Title 1 of the Government Code and Article 3 (commencing with Section 40970) of Chapter 1 of Part 2.
- 40182. "Regional water board" means a California regional water quality control board.

- 40183. (a) "Rural city" means either of the following:
- (1) A city that has a geographic area of less than three square miles, has a current waste disposal rate of less than 100 cubic yards per day, or 60 tons per day, and is located in a rural area.
- (2) A city that has a population density of less than 1,500 people per square mile, has a current waste disposal rate of less than 100 cubic yards per day, or 60 tons per day, and is located in a rural area.
- (b) Nothing in this section shall affect any reduction granted to a rural city or rural county by the board pursuant to Section 41787 prior to September 1, 1994.
- 40184. (a) "Rural county" means any county that has a population of 200,000 or less and is located in a rural area.
- (b) For the purposes of this section, Section 40183, and subdivision (d) of Section 40973, "rural area" means those counties and cities located in agricultural or mountainous areas of the state and located outside the Department of Finance's Primary Metropolitan Statistical Areas.
- (c) Nothing in this section shall affect any reduction granted to a rural city or rural county by the board pursuant to Section 41787 prior to September 1, 1994.
- 40190. "Segregated from other waste material" means any of the
 - (a) The placement of recyclable materials in separate containers.
- (b) The binding of recyclable material separately from the other waste material.
- (c) The physical separation of recyclable material from other waste material.
- 40190.5. "Sharps waste" means waste generated by a household that includes a hypodermic needle, syringe, or lancet.
- 40191. (a) Except as provided in subdivision (b), "solid waste" means all putrescible and nonputrescible solid, semisolid, and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, dewatered, treated, or chemically fixed sewage sludge which is not hazardous waste, manure, vegetable or animal solid and semisolid wastes, and other discarded solid and semisolid wastes.
 - (b) "Solid waste" does not include any of the following wastes:
 - (1) Hazardous waste, as defined in Section 40141.
- (2) Radioactive waste regulated pursuant to the Radiation Control Law (Chapter 8 (commencing with Section 114960) of Part 9 of Division 104 of the Health and Safety Code).
- (3) Medical waste regulated pursuant to the Medical Waste Management Act (Part 14 (commencing with Section 117600) of Division 104 of the Health and Safety Code). Untreated medical waste shall not be disposed of in a solid waste landfill, as defined in Section 40195.1. Medical waste that has been treated and deemed to be solid waste shall be regulated pursuant to this division.

- 40192. (a) Except as provided in subdivisions (b) and (c), "solid waste disposal" or "disposal" means the final deposition of solid wastes onto land, into the atmosphere, or into the waters of the state.
- (b) Except as provided in Part 2 (commencing with Section 40900), for purposes of Part 2 (commencing with Section 40900), "disposal" means the management of solid waste through landfill disposal or transformation at a permitted solid waste facility.
- (c) For purposes of Chapters 16 (commencing with Section 42800) and 19 (commencing with Section 42950) of Part 3, Part 4 (commencing with Section 43000), Part 5 (commencing with Section 45000), Part 6 (commencing with Section 45030), and Chapter 2 (commencing with Section 47900) of Part 7, "solid waste disposal" or "disposal" means the final deposition of solid wastes onto land.
- 40193. "Solid waste enterprise" means any individual, partnership, joint venture, unincorporated private organization, or private corporation, which is regularly engaged in the business of providing solid waste handling services.
- 40194. "Solid waste facility" includes a solid waste transfer or processing station, a composting facility, a gasification facility, a transformation facility, and a disposal facility.
- 40195. "Solid waste handling" or "handling" means the collection, transportation, storage, transfer, or processing of solid wastes.
- 40195.1. (a) "Solid waste landfill" means a disposal facility that accepts solid waste for land disposal, but does not include a facility which receives only wastes generated by the facility owner or operator in the extraction, beneficiation, or processing of ores and minerals, or a cemetery which disposes onsite only the grass clippings, floral wastes, or soil resulting from activities on the grounds of that cemetery.
- (b) For the purposes of Article 3 (commencing with Section 43500) and Article 4 (commencing with Section 43600) of Chapter 2 of Part 4, "solid waste landfill" does not include a facility which receives only nonhazardous wood waste derived from timber production or wood product manufacturing. For the purposes of the fee imposed by Section 48000, facilities which receive only nonhazardous wood waste derived from timber production or wood product manufacturing shall, notwithstanding Section 48000, pay a quarterly fee to the state board on all solid waste disposed at each disposal site, which does not exceed the amount of the fee due and payable to the state board by those facilities during the 1992 calendar year.
- 40196. "Source reduction" means any action which causes a net reduction in the generation of solid waste. "Source reduction" includes, but is not limited to, reducing the use of nonrecyclable materials, replacing disposable materials and products with reusable materials and products, reducing packaging, reducing the amount of

yard wastes generated, establishing garbage rate structures with incentives to reduce the amount of wastes that generators produce, and increasing the efficiency of the use of paper, cardboard, glass, metal, plastic, and other materials. "Source reduction" does not include steps taken after the material becomes solid waste or actions which would impact air or water resources in lieu of land, including, but not limited to, transformation.

- 40196.3. "State agency" means every state office, department, division, board, commission, or other agency of the state, including the California Community Colleges and the California State University. The Regents of the University of California are encouraged to implement this division.
- 40196.5. "State board" means the State Board of Equalization.
- 40197. "State water board" means the State Water Resources Control Board.
- 40200. (a) "Transfer or processing station" or "station" includes those facilities utilized to receive solid wastes, temporarily store, separate, convert, or otherwise process the materials in the solid wastes, or to transfer the solid wastes directly from smaller to larger vehicles for transport, and those facilities utilized for transformation.
- (b) "Transfer or processing station" or "station" does not include any of the following:
- (1) A facility, whose principal function is to receive, store, separate, convert, or otherwise process in accordance with state minimum standards, manure.
- (2) A facility, whose principal function is to receive, store, convert, or otherwise process wastes which have already been separated for reuse and are not intended for disposal.
- (3) The operations premises of a duly licensed solid waste handling operator who receives, stores, transfers, or otherwise processes wastes as an activity incidental to the conduct of a refuse collection and disposal business in accordance with regulations adopted pursuant to Section 43309.
- 40201. "Transformation" means incineration, pyrolysis, distillation, or biological conversion other than composting. "Transformation" does not include composting, gasification, or biomass conversion.

EXHIBIT 5 PUBLIC RESOURCES CODE, SECTION 43209

PUBLIC RESOURCES CODE, DIVISION 30. WASTE MANAGEMENT PART 4. INTEGRATED WASTE MANAGEMENT CHAPTER 2. SECTION 43209

43209. The enforcement agency, within its jurisdiction and consistent with its certification by the board, shall do all of the following:

- (a) Enforce applicable provisions of this part, regulations adopted under this part, and terms and conditions of permits issued pursuant to Chapter 3 (commencing with Section 44001).
- (b) Request enforcement by appropriate federal, state, and local agencies of their respective laws governing solid waste storage, handling, and disposal.
- (c) File with the board, upon its request, information the board determines to be necessary.
- (d) Develop, implement, and maintain inspection, enforcement, permitting, and training programs.
- (e) Establish and maintain an enforcement program consistent with regulations adopted by the board to implement this chapter, the standards adopted pursuant to this chapter, and the terms and conditions of permits issued pursuant to Chapter 3 (commencing with Section 44001). The enforcement agency may establish specific local standards for solid waste handling and disposal subject to approval by a majority vote of its local governing body, by resolution or ordinance. Any such standard shall be consistent with this division and all regulations adopted by the board.
- (f) Keep and maintain records of its inspection, enforcement, permitting, training, and regulatory programs, and of any other official action in accordance with regulations adopted by the board.
- (g) Consult, as appropriate, with the appropriate local health agency concerning all actions which involve health standards. The consultation shall include affording the health agency adequate notice and opportunity to conduct and report the evaluation as it reasonably determines is appropriate.
- (h) Establish and maintain an inspection program. The inspection program shall be designed to determine whether any solid waste facility is operating without a permit, or in violation of state minimum standards, or in violation of the terms and conditions of its solid waste facilities permit, or may pose a significant threat to public health and safety or to the environment, based on any relevant information. The inspection program shall also ensure frequent inspections of solid waste facilities that have an established pattern of noncompliance with this division, regulations adopted pursuant to this division, or the terms and conditions of a solid waste facilities permit.

EXHIBIT 6 HILLSIDE EROSION CONTROL ORDINANCE NO. 3683 (HECO)

ORDINANCE NO. 3683

AN ORDINANCE REVISING THE VENTURA COUNTY HILLSIDE EROSION CONTROL ORDINANCE TO, AMONG OTHER THINGS, INCREASE THE PENALTIES

The Board of Supervisors do hereby amend Ordinance No. 3539, the Ventura County Hillside Erosion Control Ordinance as follows:

Section 1.04. DEFINITIONS (AMENDED TO INCLUDE THE TERM "VIOLA-TION" AS FOLLOWS:)

<u>Violation</u> - The act of violating any of the provisions of this ordinance. Each and every day or portion thereof during which a violation is committed, continued or permitted is a separate offense. A violation can be committed by a person who does the act, causes or permits the same to be done, or owns, occupies, or controls the land upon which, or regarding which, the act is done.

Section 2.01. APPROVED HILLSIDE EROSION CONTROL PLAN.

Except as indicated below, no person shall commence or continue to perform any clearing of vegetation and/or earth moving for new agriculture or which will cause a change in agricultural use in the critical erosion area designated on the official Erosion Hazard Maps, Southern Ventura County, on file with the County Public Works Agency and the R.C.D. without first having obtained approval of a Hillside Erosion Control Plan from the R.C.D. and conforming thereto.

The plan shall be reviewed by the R.C.D. for conformance with this ordinance. If approved, a copy of the plan shall be filed with the Public Works Agency.

Section 6.01 APPEAL - RIGHT AND PROCEDURE

Any person aggrieved by the refusal of the R.C.D. to approve a Hillside Erosion Control Plan, hereinafter referred to as "plan" pursuant to this ordinance, or by the imposition of a condition on such plan, or any person who has received a Determination of Violation from the Enforcing Officer or who has thereafter failed to obtain a Notice of Compliance, may appeal to the Board of Supervisors of the County within 90 days after the date of such refusal or imposition of such condition by filing with the Clerk of the Board of Supervisors a request that the Board review the decision of the R.C.D. The appeal shall be in the form of a written notice and shall be signed by the person aggrieved. The notice shall have attached a copy of the plan as submitted to the R.C.D. and a copy of the proposed conditions on the plan and shall state clearly and concisely the reasons which the person aggrieved relies on for his appeal.

The Clerk of the Board shall set the matter for hearing within 60 days after the notice is filed with said Clerk and shall notify the person aggrieved and the R.C.D. of the date set for hearing on the matter. At the hearing, the appellant shall have the burden of establishing to the satisfaction of the Board that he is entitled to approval of the plan or modification or deletion of conditions under the provisions of this ordinance, or whatever other relief he requested. The decision of the Board is final.

The Board shall approve the plan or modify or delete the conditions as sought for by said appeal, if: (1) it finds all of the following to be true:

- (a) That the applicant would suffer substantial injury or detriment by the refusal to approve the plan or modify or delete the conditions;
- (b) That no other method of obtaining the desired results is more reasonable or less likely to be hazrdous than that proposed by the applicant; and
- (c) That the approval of the plan or the modification or deletion of conditions would not be materially detrimental to the public interest, safety, health and welfare, and would not create a substantial risk of hazard of erosion, sedimentation, debris, or mudflow to persons or property, or of interference with, impairment of the use of, or damage to any erosion control or flood control facility, storm water drainage, or water conservation facility, structure or right of way in a watercourse, or substantially degrade water quality; or
- (2) if it finds the requirements of subparagraphs (a), (b) and (c) above can be satisfied by the imposition of reasonable conditions.

ARTICLE VII. ENFORCEMENT

Section 7.01 COMPLAINTS

Complaints of work taking place in violation of this ordinance will be investigated by the County.

Section 7.02. PENALTIES FOR VIOLATIONS

Any person who:

- (a) Violates any provision of this ordinance; or
- (b) Refuses without lawful excuse to attend any hearing or to produce material evidence in his possession or under his control as required by any subpoena served upon such person as provided for in the Uniform Code; or

(c) Fails, neglects, or refuses to obey any order of the enforcing officer or the Board of Supervisors of the County of Ventura made pursuant to the provisions of the "Uniform Code", and directed to such person, after such order shall be final,

shall be deemed guilty of an infraction/misdemeanor. Conviction of an infraction shall be punishable by (1) a fine not exceeding one hundred dollars (\$100) for the first violation; (2) a fine not exceeding two hundred dollars (\$200) for a second violation of the same ordinance within one year; (3) a fine not exceeding five hundred dollars (\$500) for each additional violation of the same ordinance within one year. Conviction of a misdemeanor shall be punishable by a fine of not more than \$1000 or by imprisonment for not more than six months of by both such fine and imprisonment.

Section 8.01. DETERMINATION OF VIOLATION, RECORDATION OF DOCUMENTS AND EFFECT OF VIOLATION.

When the Enforcing Officer has determined that work has commenced or is continuing to occur in violation of this ordinance, he may issue, by certified mail, a written Determination of Violation to the violator and all others entitled to such notice under the Uniform Code. If, within 30 days after mailing of such determination, any recipient thereof appeals to the Board of Supervisors, the Board shall conduct a hearing. If there is no appeal or if the appellant does not prevail before the Board, the Enforcing Officer shall record a Determination of Violation with the County Recorder with respect to the property. The Enforcing Officer shall immediately record a Notice of Compliance when it is determined, either by himself or the Board, that the violation no longer exists. peterimination of violation shall, whether or not recorded, preclude the issuance of further zoning clearances on the property until it is determined the violation no longer exists.

PASSED AND A	ADOPTED this owing vote:	_20th	_ day of	Marc	h	1984	,
AYES:	Supervisors	Jones,	Erickson,	Dougherty,	Flynn a	and Lacey	٠.
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NOES:		None.		,			_
ABSENT:		None.		<u> </u>		<i></i>	
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RICHARD D. DEAN, County Clerk, County of Ventura, State of California and ex officio Clerk of the Board of Supervisors thereof.

By July Wells

-87

ORDINANCE NO. 3539

AN ORDINANCE RELATING TO THE CONTROL OF WATER QUALITY, SOIL EROSION AND SEDIMENTATION OF NEW AGRICULTURAL HILLSIDE DEVELOPMENTS

The Board of Supervisors of the County of Ventura, do ordain as follows:

ARTICLE 1. TITLE, PURPOSE, SCOPE, GENERAL PROVISIONS Section 1.01. TITLE.

This ordinance shall be known as the Ventura County Hillside Erosion Control Ordinance.

Section 1.02. PURPOSE.

The purpose of this ordinance is to reduce nonpoint source water pollution, to reduce degradation of water quality, to improve water quality, to control erosion and production of sediment, and to reduce related environmental damage by establishing minimum standards and providing regulations within new agricultural developments for the construction and maintenance of fills, excavations, cut and clearing of vegetation, revegetation of cleared areas, terraces, diversions, improved irrigation and drainage control in critical erosion areas, as well as for the protection of exposed soil surfaces in order to promote the safety, public health, convenience, and general welfare of the community.

Section 1.03. SCOPE.

This ordinance shall provide for the approval of Hillside Erosion Control Plans in the "critical erosion area" (designated on the official Erosion Hazard Maps, Southern Ventura County, on file with the Public Works Agency and the Ventura County Resource Conservation District) within the unincorporated territory of Ventura County including:

- (a) Fees
- (b) Review and approval
- (c) Exceptions
- (d) Appeals
- (e) Submittal for approval of Hillside Erosion Control Plan
- (f) Contents of Hillside Erosion Control Plan
- (g) Standards
- (h) Implementation

Section 1.04. DEFINITIONS.

The following definitions shall apply to this ordinance:

Best Management Practices - A practice or combination of practices and treatments for soil and water conservation that is determined to be the most effective, practicable (including technological, economic and institutional considerations) means of preventing or reducing the amount of pollution generated by nonpoint sources to a level compatible with water quality goals; applicable as Resource Management Systems.

Board - Board of Supervisors County of Ventura.

Building Permit - A permit issued by a governmental agency that authorizes the construction of a physical structure, including land preparation.

Clearing - (Land preparation) - The removal of plants, shrubs, trees, and roots thereof, structures, or other objects from the surface of the land.

County - The County of Ventura, California

Critical Erosion Area - The area with erosion hazard of soils severe to very severe which has been delineated on the official Erosion Hazard Maps, Southern Ventura County.

Debris - Loose material arising from the disintegration of rocks and vegetative material and any man made material; transportable by storm water runoff, streams or floods.

<u>Drainage</u> - The removal of surface water or groundwater from land by means of surface or subsurface drains.

Drainageway - Natural depression in the earth's surface or man-made channels or depressions in which surface waters collect as a result of rain or melting snow, but at other times are destitute of water.

Drainage Control Facility - A device for controlling drainage; a structure designed to regulate the flow rate or course of runoff water.

Emergency - An unforeseen combination of circumstances and the resulting state that causes a pressing need for immediate action.

Enforcing Officer - The Director of the Public Works Agency of the County of Ventura, or his designated representative.

Erosion - The wearing away of the land surface by running water, wind, ice, or other climatic and geological agents, including such processes as gravitational creep, or mass wasting.

Excavation - Any activity by which earth, sand, gravel, rock or any other similar material is dug into, cut, quarried, uncovered, removed, displaced, relocated or bulldozed and shall include the conditions resulting therefrom.

Fill - A deposit of earth material placed by artificial means; any act by which earth, sand, gravel, rocks or any other material

is placed, pushed, dumped, pulled, transported or moved to a new location above the natural surface of the ground or on top of the stripped surface and shall include the conditions resulting therefrom.

Flood Control Facility - Any watercourse, channel, dam, basin, or related structure or installation for the control of storm water runoff.

Flood Damage - Any excessive damage to natural or man-made resources resulting from storm water runoff.

Grading Permit - A permit issued by the County of Ventura in conformance with Chapter 70 of the Uniform Building Code as amended by the County of Ventura.

Groundwater Table - The upper surface of the groundwater or that level below which the soil is saturated with water.

Hillside Erosion Control Plan or Plan - (Resource Conservation Report) A plan which fully indicates necessary land treatment and structural measures, installations and treatments, which effectively minimize soil erosion and sediment and debris yield.

Hillside Erosion Control Plan Condition or Plan Condition - A requirement that will be executed in accordance with the Plan.

Land Disturbance - Any activity involving the clearing, grading, filling and any other activity which causes land to be exposed to the danger of erosion.

Land Preparation - The conditioning of land including clearing, land leveling for related gradient control, and soil preparation for seeding, planting and replanting of crop land or soil protection developments.

Landslide - Earth materials which are moving or have moved downward on a hillside slope as a result of the action of external forces such as gravity, seeping water, earthquakes, or a combination thereof.

Long-Term Erosion - The erosion that accumulates over an extended period of time, generally over a term greater than 2 years; erosion that is considered to be in equilibrium with natural geological processes.

Mudflow - A flowage of saturated soil or soil material down a hillside due to the accumulation of a large amount of water in the ground.

Nonpoint Source Water Pollution - Pollution that is generated by diffused land use activities, conveyed to waterways through natural processes such as storm runoff, which is controllable by changes in land management practices.

Native Vegetation - The plants, shrubs, trees and roots thereof, which grow naturally or have become adapted to a local environment without being planted or cultivated by man.

Original Surface - The surface of the ground at the time of the initial investigation of a proposed project prior to any proposed land modification.

<u>Parcel</u> - A parcel of real property as defined by the County Assessor of the County of Ventura, California.

Person - Any individual, firm, copartnership, joint venture, assocciation, social club, fraternal organization, corporation, trust, business trust, receiver, syndicate or any other group or combination acting as a unit, and the plural as well as singular members.

Physical Land Condition Report - A written summary containing data describing physical conditions including: land use, topographic relationships, geology and hydrology relationships, critical site limitations, land treatment measures, and any other significant data relating to the land.

Prompt Establishment of Protective Vegetation - Normally less than 1 year or until sufficient rainfall has occurred to provide water for growth of vegetation.

Public Nuisance - Any condition which threatens the health, safety, property or general welfare of the public.

Public Works Agency - Ventura County Public Works Agency.

R.C.D. - The Ventura County Resource Conservation District, 3360 Somis Road, Somis, California.

Sedimentation - The process by which mineral or organic matter is removed from its site of origin, transported, and deposited by water, wind or gravity.

Short-Term Erosion - Erosion which may occur prior to the establishment of vegetation or other approved erosion control measures; generally that erosion occurring over a term of up to two years.

Soil Conservation Service Land Capability Classification - A classification adopted by the United States Department of Agriculture Soil Conservation Service defining the ability of the land to produce under specified uses and conservation treatments with due regard to the inherent limitations and hazards of the land.

Soil Series - A category of soil classification in which soils with similar sequences of natural layers are grouped together and named; soils that are essentially alike in all major profile characteristics, with the exception of surface texture.

Soil Type - A subdivision of a soil series consisting of or describing soils that are alike in all characteristics, including soil texture.

Storm Water Drainage - Drainage resulting from any rainfall.

Ten-Year Frequency Rainstorm - A rainstorm of such intensity that, on the average, could be expected to be equalled or exceeded once every ten years in a twenty-four (24) hour period; a rainstorm of such intensity that has a ten percent chance of being equalled or exceeded in any given year.

<u>Uniform Code</u> - Uniform Code for Abatement of Dangerous Buildings, 1979 edition.

Vegetation - The plant life (flora) which covers the ground surface of an area.

Watercourse - A permanent stream; intermittent stream, river, brook, creek, channel or ditch for water, whether natural or man-made.

Water Conservation Facility - A structure or installation which is used for the preservation and protection of water resources; structure designed to increase water infiltration and reduce runoff.

Watershed - All the land and water within the confines of a drainage divide.

Water Quality - The condition or property of water characterized by the amounts of total dissolved solids, turbidity, odor, and other chemical, biological, and physical substances relative to the needs created by an intended use of a particular source of water.

Section 1.05. RULES APPLYING TO TEXT.

For the purpose of this ordinance, certain rules of word usage apply to the text as follows:

- (a) Words used in the present tense include the future tense, and the singular includes the plural unless the context clearly indicates the contrary
- (b) The term "shall" is always mandatory and not discretionary; the word "may" is permissive.
- (c) Words not defined by this article shall be used with their common meaning.
- (d) If a term used herein is contained in another adopted ordinance or statute, the more restrictive definition shall prevail.

ARTICLE II. PROCEDURE

Section 2.01. APPROVED HILLSIDE EROSION CONTROL PLAN.

Except as indicated below, no person shall commence or perform any clearing of vegetation and/or earth moving for new agriculture or which will cause a change in agricultural use in the critical erosion area designated on the official Erosion Hazard Maps, Southern Ventura County, on file with the County Public Works Agency and the R.C.D. without first having obtained approval of a Hillside Erosion Control Plan from the R.C.D. and conforming thereto.

The plan shall be revised by the R.C.D. for conformance with this ordinance. If approved, a copy of the plan shall be filed with the Public Works Agency.

Section 2.011. EXCEPTIONS.

An approved plan shall not be required if, during a period of 12 consecutive months, the work meets any of the following conditions:

- (a) The area of clearing of native vegetation, excavation, fill or combination thereof does not exceed 10% of a parcel or 25 contiguous acres of land under one owner, whichever is less.
- (b) An excavation or fill is authorized by a valid grading, building, well, or conditional use permit. This exception does not affect the requirement of a Hillside Erosion Control Plan for any fill made with the material from such excavation.
- (c) Upon detailed review of the data submitted on the location and site specific conditions of the proposed work, the R.C.D. determines that an erosion control plan is not required. The R.C.D. shall notify the land owner, or his representative, in writing of the exception.
- Section 2.02. SUBMITTAL FOR APPROVAL OF HILLSIDE EROSION CONTROL PLAN.

The submittal for approval of a Hillside Erosion Control Plan to R.C.D. shall include:

- (a) A location map showing the drainage and watershed position, and parcel boundaries plotted on a United States Geological Survey 7.5 minute topographic map;
- (b) Proposed work plan with reasonable scale not to exceed a maximum scale of 500 feet to one inch, existing and finished contour intervals not greater than 20 feet shown for all the area to be cleared or prepared, plus a minimum of 100 feet in all directions beyond the area to be cleared or prepared; and including the contents specified in Article III.
- (c) A physical land condition report indicating soil series and type, designation of Soil Conservation Service Land Capability Classification, geologic features such as landslides and any other critical area conditions such as gullied areas, severe erosion, etc.

ARTICLE III. CONTENT OF HILLSIDE EROSION CONTROL PLANS

Section 3.01. REQUIREMENTS.

- (a) The Hillside Erosion Control Plan shall contain appropriate information according to this article. The plan shall also conform to the requirements in the sections on "Standards" and "Implementation" of Articles IV and V, respectively.
- (b) The plan shall be prepared by a person or firm qualified by training and experience to have expert knowledge of runoff, erosion and sediment control treatments including drainage and

related land management conservation techniques. The R.C.D. may, when requested, assist with the preparation of Hillside Erosion Control Plans with available assistance from the Soil Conservation Service and designated persons or firms doing the planning work.

- (c) Formulation and implementation of the proposed measures may be adopted from recommendations contained in the Soil Conservation Service Field Office Technical Guide, which is on file with the R.C.D.
- Section 3.02. DRAINAGEWAY PROTECTION AND CONTROL MEASURES.

Where it is determined necessary by the R.C.D. to reduce the increased rate and volume of rainfall runoff due to the alteration of the runoff pattern, the following data shall be provided:

- (a) The runoff rate and volume to be expected from a 10-year, 24-hour frequency rainstorm for conditions existing before and after the proposed land disturbance.
 - (b) The location of natural and man-made drainageways.
 - (c) The size of drainage areas above cuts and slopes.
 - (d) The methods to be used to reduce erosion of drainageways.
- (e) The procedures used to trap sediment in order to protect drainage control facilities.
- (f) The methods used to prevent or control the rate and direction of runoff on roadways during and after land disturbance.
- (g) The methods used to control runoff across the slopes of cuts and fills and graded areas during and after land disturbance.
- (n) The schedule for construction of drainage protection and control measures.
- (i) The method and schedule for construction of waterway crossings.
- Section 3.03. SEDIMENT DETENTION MEASURES.

Information on the design criteria of sediment basins shall include the following:

- (a) The location and dimensions of the sediment basins.
- (b) The hydrologic and sediment transport data used to determine the proper capacity of the needed basin.
 - (c) The construction procedure and schedule.
 - (d) The source of borrow material.
 - (e) The maintenance schedule.
 - (f) The type and manner of vegetating the erodible slopes.

Section 3.04. WORK SCHEDULE

A work schedule shall be provided. No work shall be permitted on the site until the schedule has been approved as a part of the plan.

The R.C.D. shall check the adequacy of the schedule with respect to the factors that could contribute to both short-term and long-term erosion on the project site.

The work schedule shall be checked for prompt establishment of protective vegetation with full recognition of climatic and other factors that influence its establishment.

Section 3.05. MAINTENANCE OF FACILITIES

Any vegetative, cleared, or constructed facilities that are installed to provide erosion and sediment control shall be maintained by the landowner in a condition sufficient to perform their intended function.

ARTICLE IV. STANDARDS

Section 4.01. GENERAL

The Hillside Erosion Control Plan shall conform to the standards described in the applicable Resource Management Systems (Best Management Practices) as contained in the United States Department of Agriculture, Soil Conservation Service Technical Guide Covering Ventura County, which Best Management Practices are hereby incorporated herein as though fully set forth at this point. The Handbook is available for inspection at the R.C.D.

ARTICLE V. IMPLEMENTATION

Section 5.01. AUTHORITY AND RESPONSIBILITY.

All land preparation shall be conducted and soil erosion and sediment control measures shall be installed in compliance with this ordinance and in accordance with the approved Hillside Erosion Control Plan. Upon completion of the work and certification by the R.C.D., the property owner shall notify the County in writing that such work was done in accordance with the approved Hillside Erosion Control Plan and includes a copy of the approved as-built plan.

All soil and sediment control measures shall be adequately maintained to insure that they will continue to perform the intended function of erosion and sediment control.

ARTICLE VI. APPEAL

Section 6.01 APPEAL - RIGHT AND PROCEDURE

Any person aggrieved by the refusal of the R.C.D. to approve a Hillside Erosion Control Plan, hereinafter referred to as "plan" pursuant to this ordinance, or by the imposition of a condition on such plan, may appeal to the Board of Supervisors

of the County within ninety (90) days after the date of such refusal or imposition of such condition by filing with the Clerk of the Board of Supervisors a request that the Board review the decision of the R.C.D. The appeal shall be in the form of a written notice and shall be signed by the person aggrieved. notice shall have attached a copy of the plan as submitted to the R.C.D. and a copy of the proposed conditions on the plan and shall state clearly and concisely the reasons which the person aggrieved relies on for his appeal. The Clerk of the Board shall set the matter for hearing within sixty (60) days after the notice is filed with said Clerk and shall notify the person aggrieved and the R.C.D. of the date set for hearing on the matter. At the hearing, the person aggrieved shall have the burden of establishing to the satisfaction of the Board that he is entitled to approval of the plan or modification or deletion of conditions under the provisions of this ordinance, otherwise the action of the R.C.D. shall stand. The decision of the Board is final.

The Board shall approve the plan or modify or delete the conditions as sought for by said appeal, if: (1) it finds all of the following to be true:

- (a) That the applicant would suffer substantial injury or detriment by the refusal to approve the plan or modify or delete the conditions;
- (b) That no other method of obtaining the desired results is more reasonable or less likely to be hazardous than that proposed by the applicant; and
- (c) That the approval of the plan or the modification or deletion of conditions would not be materially detrimental to the public interest, safety, health and welfare, and would not create a substantial risk of hazard of erosion, sedimentation, debris, or mudflow to persons or property, or of interference with, impairment of the use of, or damage to any erosion control or flood control facility, storm water drainage, or water conservation facility, structure or right of way in a watercourse, or substantially degrade water quality; or
- (2) if it finds the requirements of subparagraphs (a), (b) and(c) above can be satisfied by the imposition of reasonable conditions.

ARTICLE VII. ENFORCEMENT

Section 7.01 COMPLAINTS

Complaints of work taking place in violation of this oridinance will be investigated by the R.C.D. who shall notify the County of observed violations.

Section 7.02 PENALTIES FOR VIOLATIONS

Any person who:

- (a) Violates any provision of this ordinance; or
- (b) Refuses without lawful excuse to attend any hearing or

to produce material evidence in his possession or under his control as required by any subpoena served upon such person as provided for in the Uniform Code; or

(c) Fails, neglects, or refuses to obey any order of the enforcing officer or the Board of Supervisors of the County of Ventura made pursuant to the provisions of the "Uniform Code, and directed to such person, after such order shall become final,

shall be deemed guilty of an infraction and, upon conviction thereof, shall be punishable by (1) a fine not exceeding fifty dollars (\$50) for the first violation; (2) a fine not exceeding one hundred dollars (\$100) for a second violation of the same ordinance within one year; (3) a fine not exceeding two hundred fifty dollars (\$250) for each additional violation of the same ordinance within one year.

ARTICLE VIII. NUISANCE ABATEMENT

Section 8.01 NOTICE OF VIOLATION

When the Enforcing Officer is notified in writing by the R.C.D. that work is being performed in violation of this ordinance or previously approved work is not being maintained or work not in conformance with a plan approved pursuant to this ordinance is being performed, he may issue a Notice of Violation to the violator and all others entitled to notice under the Uniform Code.

Section 8.02. WARNING TO ABATE NUISANCE

A violation of Section 2.01 is hereby declared to be a public nuisance and may be abated. The Enforcing Officer shall notify the violator and all others entitled to notice under the the Uniform Code by certified mail to abate the nuisance by a specific date. The notice shall indicate that in the event the nuisance is not abated, the County may do so and assess the costs of the abatement to the violator or the property.

Section 8.03. ISSUANCE OF RESTRAINING ORDER

If a violator does not abate a nuisance after being notified to do so in conformatnce with this ordinance and/or work is continuing to be performed that is in violation of the ordinance, the Enforcing Officer may request the appropriate court of jurisdiction to issue a restraining order to prohibit additional work.

Section 8.04. NUISANCE ABATEMENT BY COUNTY

If a violator does not abate a nuisance after being notified to do so in conformance with this ordinance, the nuisance may be abated by County. In the event of abatement by County, the costs of such abatement shall be assessed to the violator or the property. In the latter case, the assessment shall be collected at the same time and in the same manner as ordinary County taxes are collected and shall be subject to the same penalties and the same procedure for sale in case of delinquency as provided for ordinary taxes.

All laws amplicable to the levy, collection and enforcement of County taxes shall be applicable to such assessment. The procedure established for the repair, vacation or demolition of dangerous buildings by the Uniform Code to the extent it can reasonably be applied to violations of Section 2.01 hereof, is hereby incorporated herein as though fully set forth at this point, provided that for purposes of said Uniform Code, the Enforcing Officer shall be deemed to be the "Building Official".

Section 8.05. EMERGENCY ABATEMENT

If the Board determines that any emergency exists because of a violation of Section 2.01, then without following the procedure established by Section 8.01, 8.02, and 8.04, the Enforcing Officer may order all work done necessary to remove, abate or mitigate the condition creating such emergency. The Enforcing Officer may do the work with his own employees or may contract to have the work done; in either event, the Enforcing Officer shall keep a record of the cost of the work and charge the cost of the work to the violator, who shall repay the County for the cost thereof. If the violator does not voluntarily repay the cost, the amount shall be; assessed to his property and collected as provided in Section 8.04 hereof.

ARTICLE IX. FEES

Section 9.01 FEES

A schedule of fees for County staff services related to this Ordinance shall be adopted by resolution of the Board of Supervisors of the County. No other County fees will be required.

ARTICLE X. SEVERABILITY

Section 10.01 SEVERABILITY

If any section, subsection, sentence, clause, phrase or other portion of this ordinance is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portion or portions of this ordinance. The Board of Supervisors of the County of Ventura hereby declares that it would have adopted this ordinance and each section, subsection, sentence, clause, phrase or any portion thereof irrespective of the fact that any one or more sections, subsections, clauses, phrases or other portions be declared invalid or unconstitutional.

ARTICLE XI. APPLICABILITY

Section 11.01. APPLICABILITY

This ordinance is supplemental to existing grading regulations and does not supercede them.

ARTICLE XII. EFFECTIVE DATE

Section 12.01. EFFECTIVE DATE

This ordinance shall become effective on the 30th day after the date of its adoption.

Adopted by the Board of Supervisors of the County of Ventura on April 7 , 1981, by the following vote:

AYES: Supervisors Lacey, Jones, Erickson, Flynn, and Dougherty

NOES: None

EXCUSED: None

Chairman of the Board of Supervisors of the County of Ventura

ROBERT L. HAMM, County Clerk, County of Ventura and ex-officio Clerk of the Board of Supervisors

thereof.

Deputy Clerk

EXHIBIT 7 VENTURA COUNTY ORDINANCE CODE NO. 4308 SOLID WASTE HANDLING, DISPOSAL, REDUCTION AND DIVERSION

BOARD OF SUPERVISORS, COUNTY OF VENTURA, STATE OF CALIFORNIA
TUESDAY, JUNE 22, 2004

ORDINANCE NO. 4308/21.3 Ord . 4155

REPEALING ORDINANCES AND ENACTING NEW PROVISIONS PERTAINING TO SOLID WASTE

An Ordinance of the Ventura County Board of Supervisors repealing ordinances and enacting new provisions to the Ventura County Ordinance Code pertaining to solid waste handling and disposal, waste reduction, and waste diversion programs for unincorporated area is presented to the Board at this time, and upon motion of Supervisors Mikels, seconded by Supervisor Flynn, and duly carried, it is ordered that the same be passed and adopted as an ordinance of the County of Ventura, to be known as Ordinance No. 4308.

Board members vote as follows:

Supervisors Mikels, Flynn, and Parks

Supervisors Bennett and Long

Absent None

All members of the Board present voting on the passage and adoption of said Ordinance, it is hereby declared and ordered that said Ordinance is hereby passed and adopted as an Ordinance of the County of Ventura, to be known as Ordinance No. 4308.

It is further ordered that said ordinance shall take effect and be enforce at the expiration of thirty (30) days from the date hereof, and before the expiration of fifteen (15) days the same shall be published, with the names of the members of the Board of Supervisors voting for and against the same, at least once in the Santa Paula Times. A newspaper of general circulation printed and published in the County of Ventura, State of California.

AUG 05 2004

BY:

COPIES TO:

CEO (2) Auditor Files (2) Item 34 6/22/04

ORDINANCE NO. 4308

AN ORDINANCE OF THE VENTURA COUNTY BOARD OF SUPERVISORS REPEALING ORDINANCES AND ENACTING NEW PROVISIONS TO THE VENTURA COUNTY ORDINANCE CODE PERTAINING TO SOLID WASTE HANDLING AND DISPOSAL, WASTE REDUCTION, AND WASTE DIVERSION PROGRAMS FOR UNINCORPORATED AREA

The Board of Supervisors of the County of Ventura ordains as follows:

- Ventura County Ordinance No. 4155 (Article 3 and Sections 4740, 4741, 4750.
 4760, 4770, 4780, 4785 and their subsections of the Ventura County Ordinance Code) is hereby repealed; and
- 2. Article 3 and Sections 4740, 4741, 4750, 4760, 4770, 4780, 4785, 4786, 4787, 4788, 4789 and their subsections are hereby enacted to be a part of Chapter 7 of Division 4 of the Ventura County Ordinance Code:

ARTICLE 3 - SOLID WASTE PROGRAMS FOR UNINCORPORATED AREAS

Sec. 4740 - <u>SOLID WASTE PROGRAMS GENERALLY</u> - This Article provides for the regulation of Solid Waste collection, processing, and disposal in the unincorporated area of the County; for planning and implementation of programs for attainment of waste diversion goals established by the California Integrated Waste Management Act of 1989 (commencing with Section 40000 of the Public Resources Code), as amended; for the establishment of fees for the recovery of program costs; and for other requirements that the County may determine necessary, related to

Solid Waste, Solid Waste Handling and Solid Waste Facilities, that are not encompassed within the regulatory powers of the local enforcement agency under Sections 4700-4730 of this Chapter.

Sec. 4740-1 - <u>Authorization</u> - This Article is enacted as authorized by the California Integrated Waste Management Act of 1989 (commencing with Section 40000 of the Public Resources Code), as amended, and specifically to Sections 40057, 40058, 40059, and 41900-41903. This Article is also enacted as authorized by Article 11, Section 7 of the California Constitution that provides for the police powers reserved to the County of Ventura.

Sec. 4740-2 - <u>Administration</u> - The County Public Works Agency enforces and administers the provisions of this Article. Where the Director is invested with discretion pursuant to this Article, decisions made in the exercise of such discretion may be appealed in accordance with Section 4789.

Sec. 4740-3 - <u>Application of Article and Effect on Other Remedies</u> - This Article shall apply to all unincorporated areas located within the County. This Article shall not limit, preclude, or supersede any other criminal or civil liability or remedy provided in any other law or regulation applicable to Solid Waste, Solid Waste Handling and Solid Waste Facilities nor shall this Article preclude any other person from enforcing laws or regulations affecting Solid Waste to the extent permitted by law.

Sec. 4741 - <u>DEFINITION OF TERMS</u> - Unless the context provides otherwise, this Article and its terms shall be construed in accordance with the following definitions and, where terms are not defined in this Article shall be construed in

accordance with the usage and definition of terms provided in the Act and regulations promulgated thereunder.

Sec. 4741-1 - <u>Accounting Standards</u> - "Accounting Standards" means the methods and procedures established by the Financial Accounting Standards Board, known generally as Generally Accepted Accounting Principles, and referred to hereinafter as "GAAP."

Sec. 4741-2 - Act - "Act" mean the California Integrated Waste Management
Act of 1989 (commencing with Section 40000 of the Public Resources Code), as
amended.

Sec. 4741-3 - Agency - "Agency" means the Public Works Agency of the County.

Sec. 4741-4 - Board. "Board" means the Board of Supervisors of the County.

Sec. 4741-5 - <u>Business of Collection of Solid Waste</u>. "Business of Collection of Solid Waste" means a business enterprise in any form that obtains or receives Solid Waste for the purpose of removal, hauling, or transportation and includes, without limitation, Solid Waste hauling services. For purposes of this Article, Business of Collection of Solid Waste shall be synonymous with "Solid Waste Hauling Service."

Sec. 4741-6 - <u>Collector</u>. "Collector" means any person who engages in the Business of Collection of Solid Waste generated at or from any property, whether commercial or residential, located in the unincorporated area of the County. For purposes hereof, "Collector" shall include the owner or owners of, and the person in the control of, such business. "Contract Collector" shall mean any Collector that has

entered into a contract or franchise with the County to collect Solid Waste and/or Recyclables in any portion of the unincorporated area of the County.

Sec. 4741-7 - Commercial Customer - "Commercial Customer" means a Commercial Generator that receives Solid Waste Hauling Services from any Collector with respect to such Solid Waste. Commercial Customer may also mean a Residential Customer, as defined herein, that operates a business enterprise licensed and permitted by the County on the same parcel on which the residential Dwelling Unit is located, and the principal activities of which are physically separate from the residential Dwelling Unit and, at that customer's sole option, Solid Waste and Recyclables generated from the subject Dwelling Unit and the business enterprise are serviced together by a single Collector.

Sec. 4741-8 - Commercial Generator - "Commercial Generator" means any Person that generates Solid Waste within the unincorporated area of the County that is not a Residential Generator.

Sec. 4741-9 - <u>Composting</u> - "Composting" means the process of controlled biological decomposition of organic Solid Waste.

Sec. 4741-10 - <u>County</u> - "County" means the County of Ventura, a political subdivision of the State of California.

Sec. 4741-11 - <u>Data Information Standards</u> - "Data Information Standards" means the methods and procedures established for the County data information

system that are required to carry out the County's business functions and to maintain consistency with accounting standards.

Sec. 4741-12 - <u>Director</u> - "Director" means the Director of the County Public Works Agency, or such other County official as the Director may designate in writing.

Sec. 4741-13 – <u>Diversion</u> – "Diversion" means activities that reduce or eliminate the amount of Solid Waste from Solid Waste disposal and which return these materials to the economic mainstream in the form of raw materials for new, reused, or reconstituted products, which meet the quality standards necessary to be used in the marketplace.

Sec. 4741-14 - <u>Dwelling Unit</u> - "Dwelling Unit" means one or more rooms with internal access between all rooms, which provide complete independent living facilities for at least one family, including provisions for living, sleeping, eating, cooking, bathing, and sanitary facilities.

Sec. 4741-15 - Gardening or Landscaping Services. "Gardening or Landscaping Services" means the provision of gardening or landscaping services to residences or businesses for which the collection and transport of Solid Waste is limited to trimmings and other landscape-related material generated by and through the provision of these services.

Sec. 4741-16 - <u>Green Materials</u> - "Green Materials" means all Solid Waste that constitutes discarded vegetative or organic materials such as, without limitation, grass clippings, leaves, twigs, weeds, brush, bushes, shrub and tree prunings, holiday trees, and garden trimmings. Green Materials do not include food scraps or refuse, and may also exclude certain discarded organic materials that, because of Page 5 of 36

their size or other properties, are determined by the Director to be uneconomical to recycle.

Sec. 4741-17 - <u>Hearing Officer</u> - "Hearing officer" shall mean the person designated by the Director to conduct hearings in accordance with section 4785 et seq. The hearing officer may include any employee of the County other than the investigating officer involved in the particular proceeding or such officer's supervisor.

Sec. 4741-18 - <u>Inert Waste</u> - "Inert Waste" means Solid Waste that does not contain hazardous waste or soluble pollutants at concentrations in excess of applicable water quality objectives. For purposes of this Article, Inert Waste does not include any decomposable waste (Title 23, California Code of Regulations, Section 2524), or Solid Waste which is required to be disposed of in a Class 1, 2, or 3 disposal facility unless such material is included incidentally or inadvertently with Inert Waste and constitutes less than five percent (5%) by volume of the Inert Waste. Inert Waste shall include, without limitation, concrete, asphalt, sand, gravel, rock, soil or brick.

Sec. 4741-19 - Land Clearing Services. "Land Clearing Services" means the periodic cleanup and removal of inert or organic materials from land parcels for which the collection and transport of Solid Waste is limited to materials cleared and removed from these job sites. For purposes of this Article, land clearing services shall not include the collection and transport of Solid Waste from construction sites, the demolition of existing structures, or cleanup of litter or dump sites.

Sec. 4741-20 - <u>Liquid Waste</u> - "Liquid Waste" means any waste materials that are not spadeable.

Sec. 4741-21 - <u>Multi-Family Dwelling</u> - "Multi-Family Dwelling" means a building, or portion of a building, containing two or more Dwelling Units.

Sec. 4741-22 - Operator - "Operator" means any person that is a Collector or any person that establishes or operates a Solid Waste Facility.

Sec. 4741-23 - <u>Person</u> - "Person" means any individual, group of individuals, firm, sole proprietorship, partnership, corporation, committee, association, public agency or entity, or any other organization or group, public or private.

Sec. 4741-24 - Records - "Records" means accounting and such other records as deemed necessary by the County for the evaluation of service rates, operator service delivery, program performance, and verification of revenues and fees.

Sec. 4741-25 - Recyclables or Recycled Materials - "Recyclables" or "Recycled Materials" means all Solid Waste that is identified for Diversion in accordance with programs determined by the Director or the Board.

Sec. 4741-26 - Regular Collection Service - "Regular Collection Service" means Solid Waste Hauling Services provided by a Collector to Residential and/or Commercial Customers for Solid Waste and Recyclables collection on a scheduled basis, for which the Collector has provided containers and has established a regular monthly or bi-monthly billing cycle.

Sec. 4741-27 - Residential Customer - "Residential Customer" means a Residential Generator that receives Solid Waste Hauting Services from any Collector with respect to such Solid Waste.

Sec. 4741-28 - Residential Generator - "Residential Generator" means any person that generates Solid Waste from any Single-Family Dwelling or Multi-Family Dwelling, and from onsite domestic uses accessory to these dwellings, in the unincorporated area of the County.

Sec. 4741-29 - Revenues - "Revenues" means actual or expected cash inflows from the Business of Collection of Solid Waste in the unincorporated area of the County, including all forms of consideration such as, but not limited to, monthly service charges, one-time service charges, special handling charges, or any other revenue arising from the use, operation, or delivery of Solid Waste Hauling Services. This definition of Revenues shall be applicable to the calculation of fees only, and for all other purposes revenues shall be defined in accordance with GAAP.

Sec. 4741-30 - <u>Single-Family Dwelling</u> - "Single-Family Dwelling" means a building or a mobile home that contains one principal Dwelling Unit.

Sec. 4741-31 - <u>Solid Waste</u> - "Solid Waste" means those discarded wastes defined as such in the Act, whether or not these wastes are or may be designated for Diversion. For purposes of this definition, the term "discarded" shall have the meaning used for that term in the Act as provided by the Legislature and interpreted by the courts of California.

Sec. 4741-32 - Solid Waste Facility - "Solid Waste Facility" means any facility for which a Solid Waste Facility permit is required by the Act or by any regulation promulgated thereunder by the State of California. For purposes of this Article, Solid

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Waste Facility shall also mean any facility which engages in the commercial Composting, chipping, grinding or other processing of yard debris and Green Materials and the sale of products derived from these operations, whether or not any permit is required by the State of California, provided, however, unless a Solid Waste Facility permit is required by the Act, "Solid Waste Facility" shall not include publicly owned sewage treatment plants or any facility for which the processing of yard debris and Green Materials is undertaken principally for on-site horticultural or agricultural use.

Sec. 4741-33 - <u>Solid Waste Handling</u> - "Solid Waste Handling" means the collection, transportation, storage, transfer, or processing of Solid Waste.

Sec. 4741-34 - <u>Temporary Collection Service</u> - "Temporary Collection Service" means Solid Waste Hauling Services provided by a Collector to Commercial Customers on a one-time or limited term basis, for which the Collector has temporarily placed containers, or has otherwise provided for the removal of Solid Waste and Recyclables from a job or work site. Provision of Temporary Collection Service to a Commercial Customer shall be for a maximum of thirty (30) consecutive days, and not more than sixty (60) days in any calendar year.

Sec. 4750 - FRANCHISE OR CONTRACT FOR OPERATION OF BUSINESS

OF COLLECTION OF SOLID WASTE - The purpose of this section and its subsections is to regulate matters of collection of Solid Waste in the unincorporated area of the County including, without limitation, frequency of collection, means of collection and transportation, level of services, charges and fees, and the nature, location and extent of providing Solid Waste Hauling Services; to facilitate the implementation of waste reduction and Diversion programs; and to establish fees

which shall be used to pay costs associated with regulating the collection of Solid Waste and of implementing Diversion programs in the unincorporated area.

Sec. 4750-1 - Solid Waste Collection Franchise or Contract Required - Except as set forth in Section 4750-8 herein, no Person shall establish, operate or carry on the Business of Collection of Solid Waste in the unincorporated area of the County without either, at the County's sole option, a franchise or contract with the County. Said franchise or contract shall be established pursuant to Section 40059 of the Public Resources Code, either with or without competitive bidding, and may be an exclusive, partially exclusive or nonexclusive contract or franchise, at the County's option. The type of Solid Waste collection franchise or contract required shall be determined by the type of service provided, as follows:

Sec. 4750-1.1 - Regular Service Collection Contract or Franchise — Persons providing Regular Collection Service, as defined herein, shall be required to obtain a Regular Service Collection Contract or Franchise with the County, and shall provide the full range of Solid Waste Hauling Services to Residential and/or Commercial Customers, including the collection of Solid Waste and the collection of Recyclables, pursuant to Section 4770. Persons holding a valid Regular Service Collection Contract or Franchise may also provide Temporary Collection Service, as defined herein.

Sec. 4750-1.2 - <u>Temporary Service Collection Contract or Franchise</u> — Persons providing Temporary Collection Service only, as defined herein, shall be required to obtain a Temporary Service Collection Contract or Franchise with the County, and shall be subject to the Diversion requirements of Section 4770-2.1 and Section 4770-2.3. Persons holding a Temporary Service Collection Contract or Franchise are limited to Temporary Collection Service, and are not authorized to provide Regular Collection Service, as defined herein.

Sec. 4750-2 - <u>Contract or Franchise Provisions</u> - Each Regular Collection Service and Temporary Collection Service Franchise or Contract may include, but shall not be limited to, provisions that govern the following: term, service area boundaries, service type, service levels, service rates, days and hours of collection, routes and schedules, collection equipment, destination facilities, Diversion requirements, environmental campaigns and programs, customer service, accounting and reporting requirements, compliance with laws, County regulatory fees and charges, financial assurance, performance surety, default and remedies, and assignment.

Sec. 4750-3 - Approval of Collector Contract Applications and Assignments - The granting of Regular Collection Service and Temporary Collection Service Franchises or Contracts by the County, and of any assignments of such franchises or contracts, shall be at the sole discretion of the Board, and shall be based upon an assessment of the applicant's or assignee's qualifications including, without limitation, organizational and fiscal administration. Solid Waste management

experience, environmental practices, compliance with laws, and service performance record.

Sec. 4750-4 – Solid Waste Collection Contract or Franchise Sunset Date – It is the intent of the County to reevaluate and to potentially change its regulatory system and service area boundaries for solid waste collection in the unincorporated area, effective March 1, 2014. Therefore, no new contract or franchise term shall be approved nor permitted to extend beyond this date. As required, uniform expiration dates for all franchises or contracts shall be accomplished through renegotiation of existing agreements or, where appropriate, through exercise of the County's option to issue notices of nonrenewal.

Sec. 4750-5 - Limitation on the Number of Regular Service Contract

Collectors for Commercial Generators - Effective January 1, 2005, and continuing thereafter, no new Regular Collection Service Contracts or Franchises to operate or carry on the Business of Collection of Solid Waste from Commercial Generators in the unincorporated area of the County shall be established unless the Board, by resolution, first makes a determination, in its sole discretion, that there is a need for additional service. When making this determination, the Board may consider all factors relevant to maintenance of the public health, safety, and welfare including, without limitation, the nature and geographical distribution of existing services, the competitiveness of existing service rates, the success of County waste Diversion programs implemented by existing Contract Collectors for compliance with State mandates, the potential for adverse environmental or other impacts which the granting of additional collection contracts or franchises might create, the interests of affected Commercial Generators and existing Contract Collectors, and whether a

public demand exists for additional commercial collection services which are not then being adequately supplied or capable of being supplied by existing Contract Collectors. If, at any time, the Board determines that there is a need for additional contracts or franchises for the collection of Solid Waste from Commercial Generators in the unincorporated area of the County, the Board may approve such contracts or franchises.

Sec. 4750-6 – Parking of Collection Vehicles and Trailers – The parking of vehicles and trailers used in the Business of Collection of Solid Waste in, on or about the public streets or highways of the unincorporated area is prohibited. Each Contract Collector and/or any Person who otherwise is a Collector of Solid Waste generated by Residential and/or Commercial Customers located in the unincorporated area of the County of Ventura shall be required to maintain a permitted site for such vehicles and trailers, in compliance with the Ventura County Zoning Ordinance. Further, each Collector shall not otherwise be in violation of sections of the Ventura County Ordinance Code related to the parking of commercial and oversize vehicles.

Sec. 4750-7 - Collector Fee - Each Contract Collector and any Person who otherwise is a Collector of Solid Waste generated by Residential and/or Commercial Customers located in the unincorporated area of the County shall pay a Collector Fee based on the Revenues from its Business of the Collection of Solid Waste in the unincorporated area. Payment shall be made in accordance with Section 4780-5 of this Article and the schedule of fees adopted by resolution of the Board. This fee shall be in addition to any other fees paid or to be paid by the Collector.

Sec. 4750-8- Exclusions from the Requirements of Sections 4750-1 and 4750-7 - A Person shall not be required to have a contract or franchise with the County pursuant to Section 4750-1 or to pay a Collector Fee pursuant to Section 4750-7 with respect to, but only to the extent of, the following activities:

- a) Inert or Liquid Waste -The collection of inert waste or liquid waste where such wastes are legally taken to any location other than a permitted Solid Waste Facility; or
- b) Onsite Waste Facilities -The collection of Solid Waste which is legally taken to any onsite Solid Waste Facility within the same parcel of land or within the same land use authorization boundary where the Solid Waste was generated (e.g. conditional use permit); or
- c) <u>Special Districts</u> -The collection of Solid Waste where such collection is statutorily regulated by the governing body of a Special District for areas within that District's boundaries if the County determines that said District's regulations meet the purposes and intent of the Act insofar as such performance within said District boundaries is concerned; or
- d) <u>Gardening or Landscaping Services</u> -The provision of Gardening or Landscaping Services, as defined herein; or
- e) <u>Land Clearing Services</u> -The provision of Land Clearing Services, as defined herein.

Sec. 4750-8 - Enforcement of Exclusive Contracts or Franchises - Any Contract Collector who has entered into an exclusive contract or franchise with the County in accordance with Section 4750-1 may at any time bring an action in the superior court for injunctive relief and damages against any Person engaging in the Business of Collection of Solid Waste who by virtue of such business is infringing upon the exclusive service area granted by the said contract or franchise to the said Contract Collector and who, in violation of Section 4750-1, has no contract or franchise with the County authorizing such activity. Prior to bringing such action, the Contract Collector shall notify the Director of its intention to file an action. In its discretion, the County may join in such action as a plaintiff, may bring an independent action to enforce Section 4750-1 or any pertinent contract or franchise or may take no action. Any action filed by the Contract Collector shall be pursued solely at the Contract Collector's expense, and the Contract Collector shall include in its claim any costs incurred by the County as a result of this action if assigned by the County, and shall reimburse the County for such costs if collected in the action.

Sec. 4760 - FRANCHISE OR CONTRACT FOR OPERATION OF SOLID WASTE FACILITIES - The purpose of this section and subsections is to regulate matters of solid waste processing and disposal in the unincorporated area of the County including, without limitation, the nature, location, and extent of providing Solid Waste Facility services; the level of services, charges and fees; the establishment of financial assurance and indemnification; and the implementation of waste processing and Diversion programs.

Sec. 4760-1 - <u>Solid Waste Facility Franchise or Contract Required</u> - No Person shall establish or operate a Solid Waste Facility in the unincorporated area of the County unless, at the County's sole option, either (1) a non-exclusive or exclusive franchise has been granted by the Board to such Person in accordance with the provisions of applicable law or (2) the Board has entered into a contract with such Person to establish or operate a Solid Waste Facility.

Sec. 4760-2 - <u>Solid Waste Facility Franchise or Contract Provisions</u> - Each Solid Waste Facility Franchise or Contract may include, but shall not be limited to, provisions that govern the following activities: facility administration and record-keeping, tonnage tracking and reporting, rate regulation, waste diversion programs, County regulatory fees and charges, environmental and permit compliance, financial assurance, performance surety, default and remedies, and assignment.

Sec. 4770 - <u>WASTE DIVERSION REQUIREMENTS</u> -The purpose of this section and its subsections is to provide for the implementation of residential and commercial Diversion programs by Contract Collectors that will assist in achieving the Diversion goals established in the Act.

Sec. 4770-1 - Residential Customer Diversion Requirements

Sec. 4770-1.1 - <u>Director's List of Residential Recyclables</u> - The Director shall develop, maintain, and publish, in consultation with Contract Collectors and other Diversion industry representatives, a list of Recyclables generated by Residential Customers ("Director's List of Residential Recyclables") that shall be subject to the requirements of Section 4770-1.2. In determining what types of Solid Waste shall be included on the Director's List of Residential Recyclables, the Director shall Page 16 of 36

periodically consider and evaluate processing capability and capacity, market availability, and economic feasibility. Except as provided in Section 4770-1.4 below, each contract Collector providing services to Residential Customers shall provide for collection of all materials on the Director's List of Residential Recyclables. Nothing in this section is intended to limit or preclude the separate collection and Diversion of materials other than and in addition to those on the Director's List of Residential Recyclables.

Sec. 4770-1.2 - Supply and Use of Separate Containers for Residential Recyclables - Each Collector shall supply to each of its Residential Customers and each Residential Customer shall accept, except to the extent such Residential Customer is determined to be exempt pursuant to Section 4770-1.4, a collection container designated for the separate deposit of Green Materials by the Residential Customer and a collection container designated for the separate deposit of commingled Recyclables by the Residential Customer. The Collector's supply of such containers shall be in addition to other containers supplied by the collector for Solid Waste generally. Where it would be more feasible, the Collector may, upon the written approval of the Director, supply containers for use in common by several Residential Customers provided such Residential Customers have access to each type of container required by this section. As a part of its Regular Collection Service, each Collector shall collect Green Materials and commingled Recyclables from such containers, if any, deposited therein by the Residential Customer. The Collector shall keep these materials separate from non-Recyclable Solid Waste, take measures to minimize contamination, and shall handle these materials in a manner which ensures that they are recycled or otherwise diverted from disposal.

Sec. 4770-1.3 - Pricing Incentives for Residential Waste Diversion - Each Collector providing services to Residential Customers shall offer multiple levels of service and pricing incentives which encourage the separation of Recyclables from refuse, and which discourage disposal. These levels of service and associated pricing, which may include variable container rates, shall be designated and approved in advance by the Director. The Director may exempt a Contract Collector from some or all of the requirements of this section if the Director determines that offering multiple levels of service is not economically feasible.

Sec. 4770-1.4 - Exemption from Section 4770-1.2 - The Director may exempt a Contract Collector from some or all of the requirements of Section 4770-1.2 if the Director determines that supplying separate containers for commingled Recyclables is not economically feasible, or if the materials designated on the Director's List of Residential Recyclables can be otherwise separated and effectively diverted from disposal. In addition, there shall be an exemption available for Green Materials containers as provided in this section. If such exemption is granted in accordance with this section, the Collector shall not be required to supply a separate Green Materials container to the exempt Residential Customer and the exempt Residential Customer shall not be charged the additional fee applicable to that container that would otherwise be allowed. Any Residential Customer may apply for an exemption with respect to the Green Materials container by submitting an application for such exemption to the Director. A form for application of the exemption shall be prepared by the Director and supplied to anyone requesting such application. The Director may require that such application be signed under penalty of perjury by the person

applying for the exemption. Based upon such application and, if requested by the Director, an inspection of the premises affected, the Director may exempt such Residential Customer if the Director finds that either of the following is true: (a) that the Residential Customer does not generate any significant Green Materials; or (b) that the Residential Customer is Composting or causing to be composted, or is otherwise ensuring that other Persons compost or divert, whatever Green Materials are generated by the Residential customer. If the applicant refuses to allow an inspection, the Director may deny the application. As a further condition of granting such exemption, the Director may require that the Residential Customer consent to continuing inspection of the affected premises at any reasonable time; that the Residential Customer remain in compliance with the requirements of the exemption as provided in this section; and that the Residential Customer comply with all state and local laws and regulations governing Composting. The Director may revoke any exemption that has been granted at any time the Director determines that the Residential Customer is no longer qualified for the exemption or is not complying with the terms and conditions of the exemption. Any exemption issued by the Director, and any denial or revocation of the same, shall be in writing. The Director shall mail or deliver a copy of any exemption, or denial or revocation, to the Residential Customer and to the Contract Collector from whom such Residential Customer obtains services.

Sec. 4770-2 - Commercial Customer Waste Diversion Requirements

Sec. 4770-2.1 - <u>Director's List of Commercial Recyclables</u> - The Director may develop, maintain, and publish, in consultation with Contract Collectors and

other Diversion industry representatives, a list of Recyclables generated by Commercial Customers ("Director's List of Commercial Recyclables") that shall be subject to the requirements of Section 4770-2.2. In determining what types of Solid Waste shall be included on the Director's List of Commercial Recyclables, the Director shall consider and evaluate processing capability and capacity, market availability, and economic feasibility. Except as provided in Sec. 4770-2.5 below, each Contract Collector providing services to Commercial Customers shall separate or cause to be separated from refuse and shall arrange for Diversion all materials on the Director's List of Commercial Recyclables. Compliance with the Diversion requirements of this section is mandatory for Contract Collectors providing Regular Collection Service and Temporary Collection Service. Nothing in this section is intended to limit or preclude the separate collection and Diversion of materials other than and in addition to those on the Director's List of Commercial Recyclables.

Sec. 4770-2.2 - Regular Collection Service: Supply and Use of Separate Recyclables Containers for Commercial Customers - Each Contract Collector providing Regular Collection Service shall supply to each of its Commercial Customers and each Commercial Customer shall accept, unless such Commercial Customer is determined to be exempt pursuant to Section 4770-2.5, one or more collection containers, as appropriate, designated for the separate deposit of materials on the Director's List of Commercial Recyclables by the Commercial Customer. The Collector's supply of such containers shall be in addition to other containers supplied by the Collector for Solid Waste generally. Where it would be more feasible, the Collector may, upon the written approval of the Director, supply containers for use in common by several Commercial Customers provided such Commercial Customers

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have access to the type and number of containers sufficient to fulfill the requirements of this section. As a part of its Regular Collection Service, each Collector shall collect Green Materials and other Recyclables on the Director's List established pursuant to Section 4770-2.1, if any, deposited therein by the Commercial Customer. The Collector shall keep these materials separate from non-Recyclable Solid Waste, take measures to minimize contamination, and shall handle these materials in a manner which ensures that they are recycled or otherwise diverted from disposal.

Sec. 4770-2.3 - <u>Temporary Collection Service: Collector Separation of Recyclables Generated by Commercial Customers</u> - Each Collector providing Temporary Collection Service shall separate or cause to be separated from refuse all materials on the Director's List of Commercial Recyclables as follows:

Sec. 4770-2.3.1 - Containerized Temporary Service - Each Collector providing Temporary Collection Service involving containers shall supply to each of its Commercial Customers and each Commercial Customer shall accept, unless determined to be exempt pursuant to Section 4770-2.5, one or more collection containers designated for the separate deposit of materials on the Director's List of Commercial Recyclables. The Collector's supply of such containers delivered to a Commercial Customer job site shall be in addition to other containers delivered by the Collector for Solid Waste generally. As a part of its Temporary Collection Service, each Collector shall collect Recyclables, if any, deposited therein and keep these materials separate from non-Recyclable Solid Waste. Where it would be more feasible, a Collector may supply a single container to its Commercial Customer for commingled materials, provided that, upon collection and removal, the Collector

Page 21 of 36

delivers such containers to a permitted material recovery facility for the separation of Recyclables. Whether placed in separated or commingled containers, the Collector shall take measures to minimize contamination, and shall handle these materials in a manner which ensures that they are recycled or otherwise diverted from disposal.

Sec. 4770-2.3.2- Non-Containerized Temporary Service - Each Collector providing Temporary Collection Service through the direct loading of Solid Waste into motorized vehicles or trailers shall accomplish the separation of Recyclable materials from refuse prior to collection and removal, or alternatively shall deliver commingled loads to a permitted materials recovery facility for the separation of Recyclables. Whether separated at the job site or delivered to a materials recovery facility, the Collector shall take measures to minimize contamination, and shall handle these materials in a manner that ensures that they are recycled or otherwise diverted from disposal.

Sec. 4770-2.4 - Pricing Incentives for Commercial Waste Diversion - Each Collector providing services to Commercial Customers shall offer multiple levels of service and pricing incentives which encourage the separation of Recyclables from refuse, and which discourage disposal. These levels of service and associated pricing shall be designated and approved in advance by the Director, and may include, without limitation: (a) variable container rates for refuse, small bin or barrel service for Commercial Recyclables collection, and rates for Recycling which are set below rates charged for refuse containers of comparable size; and (b) surcharges for containers that contain mixed or contaminated loads that require separation of Recyclables at a permitted materials recovery facility. The Director may exempt a

Contract Collector from some or all of the requirements of this section if the Director determines that offering multiple levels of service is not economically feasible.

Sec. 4770-2.5 - Exemption from Sections 4770-2.2 and 4770-2.3 - The Director may exempt a Contract Collector from some or all of the requirements of Section 4770-2.2 and/or Section 4770-2.3 if the Director determines that one of the following is true: (a) that supplying separate containers for commingled Recyclables is not economically feasible; (b) that the materials designated on the Director's List of Commercial Recyclables will be otherwise separated and effectively diverted by the Contract Collector or Commercial Customer from disposal, or (c) that the Commercial Customer does not generate significant amounts of Recyclables. If such exemption is granted in accordance with this section, the Collector shall not be required to supply a separate Recycled Materials container to the exempt Commercial Customer and the exempt Commercial Customer shall not be charged the additional fee applicable to that container that would otherwise be allowed. Any Commercial Customer may apply for an exemption with respect to the Recycled Materials container by submitting an application for such exemption to the Director. A form for application of the exemption shall be prepared by the Director and supplied to anyone requesting such application. The Director may require that such application be signed under penalty of perjury by the person applying for the exemption. Based upon such application and, if requested by the Director, an inspection of the premises affected, the Director may exempt such Commercial Customer if the Director finds that either of the following is true: (a) that the Commercial Customer does not generate any significant Recyclable Materials; or (b) that the Commercial Customer is diverting or causing to be diverted, through back-hauling, self-hauling, or other means, whatever Recyclable Materials are generated by the Commercial Customer. If the applicant refuses to allow an inspection, the Director may deny the application. As a further condition of granting such exemption, the Director may require that the Commercial Customer consent to continuing inspection of the affected premises at any reasonable time; that the Commercial Customer remain in compliance with the requirements of the exemption as provided in this section; and that the Commercial Customer comply with all state and local laws and regulations governing Diversion. The Director may revoke any exemption that has been granted at any time the Director determines that the Commercial Customer is no longer qualified for the exemption or is not complying with the terms and conditions of the exemption. Any exemption issued by the Director, and any denial or revocation of the same, shall be in writing. The Director shall mail or deliver a copy of any exemption, or denial or revocation, to the Commercial Customer and to the Contract Collector from whom such Commercial Customer obtains services.

Sec. 4770-3 – <u>Waste Management Fee</u> – Each Contract Collector and any Person who otherwise is a Collector of Solid Waste generated by Residential and/or Commercial Customers located in the unincorporated area of the County shall pay a Waste Management Fee based on the revenues from its Business of the Collection of Solid Waste in the unincorporated area. Payment shall be made in accordance with Section 4780-5 of this Article and the schedule of fees adopted by resolution of the Board. This fee shall be used to pay costs associated with preparing, adopting, implementing, and administering the County Source Reduction and Recycling

Element, Household Hazardous Waste Element, Nondisposal Facility Element, and such other plans and programs as may be required by the Act or by Board integrated waste management, bioenergy, and pollution prevention policies for the unincorporated area of the County. This fee shall be in addition to any other fees paid or to be paid by the Collector.

Sec. 4780 -FINANCIAL AND INFORMATION MANAGEMENT

Sec. 4780-1 - Accounting Information Generally - Financial information submitted by Operators to the County shall be prepared and maintained in accordance with GAAP.

Sec. 4780-2 - <u>Accounting Accrual Method</u> - Operators may utilize any of the four following accounting methods for recognizing economic performance and earnings, provided that such method is consistent with the standards set forth in GAAP and with the operator's internal audits or federal income tax returns, and with the statement of Revenues pursuant to Section 4780-5: (1) specific performance, (2) proportional performance, (3) completed performance, or (4) collection.

Sec. 4780-3 - <u>Data Information Generally</u> - Data information relevant to the Business of Collection of Solid Waste and the operation of Solid Waste Facilities submitted to the County by Operators shall be prepared and maintained in accordance with published County Data Information Standards provided by the Director.

Sec. 4780-4 - Records - Operators shall maintain Records for at least five (5) years following the period to which they pertain. Upon seven (7) days written notice,

the County shall have the right to inspect the required Records at any time during official business hours.

Sec. 4780-5 - Fee Payment and Statement of Revenues - Fees required by Sections 4750-7 and 4770-3 shall be paid quarterly by each Collector within 30 days of the close of each calendar quarter, i.e. prior to April 30, July 30, October 30, and January 30 of each calendar year. Accompanying payment of such fees, the Collector shall file with the Director a separate statement for each contract service area, verified by the Collector's oath or the oath of the manager or other responsible officer of the Collector, showing total Revenues from its Business of the Collection of Solid Waste originating within the contract service area during the preceding quarter. Such statement shall contain, in a format approved by the Director, supporting documentation of Revenues received during the preceding quarter by jurisdictional allocation of tonnage collected and disposed, waste category or type, generator type, number of customers, and such other factors as may be determined by the Director as necessary for program administration. Simultaneously with the filing of the statement, the Collector shall submit to the Director all fees required by this Article and by resolution of the Board which are based upon a percentage of such Revenues for the preceding quarter. Fees shall be calculated based upon the Revenues from the Collector's Business of the Collection of Solid Waste in each contract service area located in the unincorporated area. Acceptance of any payment from a Collector shall not be construed as a release or as an accord and satisfaction of any claim the County may have for further or additional sums payable under this ordinance or for the performance of any other obligation under this Article.

Sec. 4780-6 - Audit -The County shall have the right to audit the Records required herein and the cost of the audit shall be borne by the Operator when inaccuracies in the Records result in a material difference in the disclosure of the Operator's economic position as it relates to, without limitation, the following: customer charges, fee assessments and payments, County specific service delivery costs, and program performance. For purposes of this Article, material difference shall mean a difference of ten percent (10%) or more.

Sec. 4780-7 - Penalties - Fees required pursuant to Sections 4750-7 and 4770-3, received after the due dates specified in Section 4780-5 shall include a late charge penalty on the amount due calculated at an annual rate of 12 percent, which shall accrue until paid in full. For the purposes of this section, the post mark date shall be considered as the date of payment when properly endorsed by the United States Postal Service.

Sec. 4780-8 - <u>Disclosure of Customer Names and Addresses</u> - (a) If the County receives for its use the names or addresses of customers of a Contract Collector and such information constitutes a trade secret or is the confidential or proprietary information of such Contract Collector, upon request by the said Contract Collector, the County shall not disclose such information to the public or to any other Contract Collector without a court order compelling such disclosure.

(b) If any Contract Collector directly or indirectly obtains from the County or any of its personnel or agents any trade secret or confidential or proprietary information referred to in subsection (a) hereof which such information pertains to another Contract Collector, the Contract Collector that improperly obtained such

information shall be liable for any damage caused thereby and shall indemnify the County with respect to any claims made arising therefrom.

- (c) If any Person proposing to become a Contract Collector directly or indirectly obtains from the County or any of its personnel or agents any trade secret or confidential or proprietary information referred to in subsection (a) hereof which such information pertains to a Contract Collector, such Person shall be barred from becoming a Contract Collector for a period of three years following receipt of such information.
- (d) If, pursuant to the California Public Records Act, commencing with Section 6250 of the Government Code or pursuant to a subpoena, any Person requests from the County the opportunity to examine documents or to receive copies of documents that contain information that is protected from disclosure under subsection (a) hereof, the County shall notify all affected Contract Collectors. In the case where a subpoena has been served and where the Person requesting the documents refuses to withdraw the subpoena or to enter into some form of protective order acceptable to the affected Contract Collector, the affected Contract Collector shall file, at the Contract Collector's expense, an application with the court for a protective order or an order to quash such subpoena if the Contract Collector seeks to protect such information. The County shall not oppose such application. In the case where a request is made under the Public Records Act and where the Person making the request refuses to withdraw the request or to agree upon terms of disclosure that are acceptable to the affected Contract Collector, the County shall deny access to such documents on the ground that such information is exempt therefrom unless directed

otherwise by the affected Contract Collector. In the event the Person requesting access to such documents files an action or motion with the court to obtain access, the affected Contract Collector shall, at the Contract Collector's expense, appear in the action or motion to oppose such access if the Contract Collector seeks to protect such information. Upon demand by the County, the affected Contract Collector, at the Collector's expense, shall also defend the County and shall indemnify the County with respect to any award of attorney's fees. In the case of a subpoena or request under the Public Records Act, the County shall comply with whatever order is issued by the court pertaining thereto.

Sec. 4785- <u>CIVIL ADMINISTRATION AND ENFORCEMENT</u> - The Agency and its Director are hereby authorized to administer and enforce Article 3 and Article 4 of Chapter 7 of Division 4 (commencing with Section 4740 of the Ventura County Ordinance Code), as amended.

Sec. 4786- CRIMINAL SANCTIONS - Any Person who violates any Section of Article 3, or any provision thereof is guilty of a misdemeanor/infraction as specified in Section 13-1 of the Ventura County Ordinance Code, and upon conviction thereof shall be punishable in accordance with Section 13-2 of the Ventura County Ordinance Code. Each such Person shall be guilty of a separate offense for each and every day during any portion of which any violation of Article 3 is committed, continued, or permitted by such Person and shall be punishable thereof as provided in Section 13-2 of the Ventura County Ordinance Code.

Sec. 4787- NOTICE OF VIOLATION - In addition to any other remedies, the Agency may issue a notice of violation to any Person who is violating any provision of Page 29 of 36

this Article. A notice of violation shall identify the Person, if known, committing the wrongful actions or failure to act; describe the time, place and nature of the pertinent activities; state the ordinance, applicable law or order that has been violated; and, identify the owner and, if known, the Person in possession of the property, if any, where the violation is occurring or has occurred. The Agency may issue a notice of violation by service of the notice on the Persons identified in the notice. A notice of violation may contain a specified time for corrective action. If corrective action is not taken within the specified time then the Director may provide for whatever remedy the Director deems appropriate. Any contest of a notice of violation may be heard in accordance with the hearing procedures in Section 4788 et seq.

Sec. 4788 - <u>HEARING OFFICER AUTHORITY AND HEARING PROCEDURE</u>
- Any hearing conducted before the Hearing Officer pursuant to this Article shall be conducted in accordance with this Section and its Subsections.

Sec. 4788-1 – <u>Scope of Hearing Officer Authority</u> - The Hearing Officer shall have the authority to hear and determine any appeal of a notice of violation. The hearing officer may provide whatever remedy the Hearing Officer deems appropriate, including without limitation to affirm actions of the Agency or the Director, modify such actions or reverse such actions.

Sec. 4788-2 – <u>Petition For Hearing</u> - Any Person who is entitled to a hearing under this Article and who seeks to appeal shall request a hearing by service of a petition for hearing on the Agency within the time required by the pertinent section of this Article. The Agency shall prepare a form for such petition and shall make such form available to anyone on request. The petition shall state the name and address of petitioner and shall further state the name and address of any other Person whose

rights will be or may be affected by the proceedings, including without limitation the owner and operator of any Solid Waste Facility, Collector, Solid Waste chipping and grinding operation or property affected thereby. The petition shall briefly state the material facts at issue the remedy sought and shall have attached any notice of noncompliance, abatement order, remedial cost claim or any other notification by the Agency that is at issue.

Sec. 4788-3 - <u>Notice of Hearing</u> - After a timely petition for hearing is served, the Agency shall serve notice of the hearing which shall be scheduled to commence no later than 120 days after service of the petition for hearing on the Agency. The notice of hearing shall state: (a) the nature of the proceeding; (b) the date, time and place of the hearing; and, (c) the name of the hearing officer.

Sec. 4788-4 - Service of Notice of Hearing - The Agency shall serve notice of the hearing, a copy of the petition for hearing, and a copy of this Section on all persons named in the petition that are affected thereby, on any Person that requests such notice, and on any other Person whose rights the Agency believes may be affected thereby, including without limitation any Person who is owner of record of any facility or property affected by the proceedings. The Agency shall complete such service of notice upon all such Persons no later than thirty (30) days prior to the date scheduled for commencement of the hearing. The Agency shall also cause the notice of the hearing to be published in a newspaper of general circulation at least one time not less than twenty (20) days before commencement of the hearing. The published notice shall state that copies of the petition for hearing and this Section are available for public review at the Agency. Attendance at the hearing by any Person shall constitute a waiver of any defective notice with respect to such Person. Failure

of any person who was properly served with notice to appear at the hearing shall constitute a waiver of such Person's right to be heard.

Sec. 4788-5 - Hearing Generally - The hearing shall be public and shall be held before the Hearing Officer at the date, time and place stated in the notice of hearing or at such other date, time and place as may be ordered by the Hearing Officer at the time of the hearing. The Hearing Officer may continue any hearing as may be reasonably necessary for the convenience of the Hearing Officer, witnesses, the Agency or any other Person entitled to receive notice of the hearing. Any new time and place for the hearing shall be publicly announced at the time and place of the noticed hearing. No further notice need be published or served upon anyone as to such continuances. Any Person affected by the proceedings may be heard and be represented by counsel. The Hearing Officer may consolidate several petitions for a hearing into one hearing if the petitions relate to the same factual issues, the same Collector, the same Solid Waste Facility, the same Solid Waste chipping and grinding operation or the same property.

Sec. 4788-6 - Evidence - The Hearing Officer shall require that all live testimony at the hearing be taken under oath if requested by the Agency or any affected Person. The Hearing Officer shall have the power to administer oaths or affirmations and to certify official acts. The Hearing Officer may permit testimony by affidavit or declaration if the Person providing such testimony is made available by subpoena or otherwise for cross examination where requested by any affected Person. The Hearing Officer may allow any testimony to be given in informal narrative style. The Agency and any affected Person shall have the right to call and examine witnesses, to introduce exhibits, to cross-examine witnesses on any

relevant issue, even though such matter was not covered on direct examination, and to impeach any witness, regardless of whether that Person first called the witness to testify. Any relevant evidence shall be admissible if it is the sort of evidence upon which responsible Persons are accustomed to rely in the conduct of serious affairs. regardless of the existence of any common law or statutory rule, which would make improper the admission of such evidence in a civil action. Hearsay evidence. including without limitation any report by the Agency, shall be admissible for any purpose but shall not be sufficient itself to support a finding on a material issue if there is conflicting evidence unless, in light of that evidence, the Hearing Officer determines that the hearsay evidence is trustworthy. Either before or after submission of the case for decision, the Hearing Officer may take official notice of any generally accepted technical or scientific matter and of any fact which may be judicially noticed by the courts of this state. The Agency and any affected Person at the hearing shall be informed of any matters to be officially noticed. Upon request, the Agency and any affected Person at the hearing shall be given reasonable opportunity on request to refute any officially noticed matters.

Sec. 4788-7 - <u>Subpoena Power</u> - At the request of the Agency or any affected Person, the Hearing Officer shall issue subpoenas and subpoenas duces tecum for attendance of witnesses and production of documents at the hearing. Compliance with the provisions of section 1985 of the Code of Civil Procedure shall be a condition precedent to the issuance of a subpoena duces tecum. Either before or after the hearing has commenced, the Hearing Officer may also issue subpoenas and subpoenas duces tecum as the Hearing Officer deems appropriate.

Sec. 4788-8 - Contempt - If any Person disobeys or refuses to respond to a subpoena or subpoena duces tecum, or refuses to take the oath or affirmation of a witness, or thereafter refuses to be examined, or is guilty of misconduct during the hearing, the Hearing Officer may certify the facts to the superior court for a contempt proceeding. The court shall thereupon issue an order directing the Person to appear before the court and show cause why he should not be punished for contempt. The order and a copy of the certified statement shall be personally served on the Person against whom contempt has been charged. The same proceeding shall be held, the same penalties may be imposed and the Person charged may purge himself of the contempt in the same way as in the case of a Person who has committed contempt in a trial of a civil action before the superior court.

Sec. 4788-9 - Record - The Agency shall record the hearing either on a recording device or by use of a certified court reporter and shall make the recording or transcript available to any Person upon request. The Agency shall provide a certified copy of the transcript or recording, or a transcript prepared therefrom, to any Person who requests it and who pays to the Agency the cost of making and certifying copy and, in addition, the cost of preparing and certifying the transcript, if the transcript has not already been prepared.

Sec. 4788-10 - Ruling - At the conclusion of the hearing or within a reasonable time thereafter, the Hearing Officer shall issue a written ruling on the factual and legal issues presented. The ruling shall be supported by the weight of the evidence presented at the hearing. The Hearing Officer may decide the issues based upon the Agency's written report standing alone if the Person that petitioned for a hearing fails to appear at the time of the hearing and no other affected Person

appears to present evidence. The ruling shall include the remedy, if any, that is ordered by the Hearing Officer.

Sec. 4788-11 - <u>Service of Ruling</u> - The Agency shall promptly serve the Hearing Officer's ruling on each Person who was entitled to be served with notice of the hearing and any Person requesting a copy in writing. Said findings and ruling need not be published.

Sec. 4788-12 - <u>Finality of Ruling</u> - The Hearing Officer's ruling shall be final upon the date of service of the ruling and, subject to judicial review, shall be binding on the parties. All rulings by the Hearing Officer may be enforced immediately after they become final unless the superior court grants a stay or injunctive relief that prevents or limits enforcement thereof.

Sec. 4789 - APPEAL

Appeal of Discretionary Decision of Director - Any Person aggrieved by a discretionary decision of the Director under this Article may appeal such decision within ten (10) working days of issuance of the decision. The aggrieved Person shall first appeal to the Director in writing, stating why he or she believes the decision is in error. The Director shall provide the aggrieved Person with a final written decision containing the reasons on which such decision is based within thirty (30) working days of receipt of the appeal. If the aggrieved Person is not satisfied with the Director's final written decision, he or she may request a hearing pursuant to section 4788 herein.

4789-2 Appeal of Ruling of Hearing Officer – Any Person subject to a final ruling of a Hearing Officer and not satisfied with the Hearing Officer's ruling may appeal such ruling directly to the Board in writing. The appeal to the Board shall

contain a copy of the Hearing Officer's final ruling and state clearly and concisely why the Person is aggrieved by the Hearing Officer's ruling. Any such appeal shall be filled with the Clerk of the Board within ten (10) working days of such ruling. The Clerk of the Board shall promptly set the matter for hearing at a regular meeting of the Board and shall notify the aggrieved Person and the Hearing Officer of the setting. The aggrieved Person and any interested parties may present oral or written testimony at the hearing. After the close of the hearing, the Board shall sustain or deny the appeal, or may modify the Hearing Officer's decision. The decision of the Board is final.

PASSED AND ADOPTED this 22 day of June, 2004, by the following votes:

AYES: Supervisors Mikels, Flynn, and Parks

NOES: Supervisors Bennett and Long

ABSENT: NONe

Steve Bennett

Chair, Board of Supervisors

Back

ATTEST: JOHN F. JOHNSTON Clerk of the Board of Supervisors, County of Ventura, State of California

By: C. Christian ?

Deputy Clerk of the Board

EXHIBIT 8 HECO PLAN 174 FOR MR. WAYNE FISHBACK

NAME HILSIDE EROSION CONTROL PLAN APPLICATION NO. 174

LANDOWNER'S ACKNOWLEDGEMENT

The Landowner(s) acknowledge that:

- 1. He/she has received a copy of the construction drawings and specification, and that he/she has an understanding of the contents and requirements.
- 2. The landowner(s) agree to carry out the soil, water, and related resource conservation practices on the land indicated in the plan, to the best of his/her ability including essential maintenance work.
- 3. He/she has obtained all the necessary permits.
- 4. No changes will be made in the installation of the job without prior concurrence of the RCD.
- 5. Maintenance of the installed work is necessary for proper performance during the project life.

ACCEPTED BY: B. Wy Jibly DATE 6-91-06

VENTURA COUNTY RESOURCE CONSERVATION DISTRICT

P.O. Box 147 (3380 Somis Road), Somis, CA 93066

REVIEW AND APPROVAL SHEET

CONSERVATION REPORT AND HILLSIDE EROSION CONTROL PLAN (VENTURA COUNTY ORDINANACE NO. 3539)

Landowner(s)	Mr. B. Wayne Fishback								
Address	3106 Calusa Avenue								
		Valley, CA 930	63						
Phone No.	805-5	26-9757							
Date of Applicat	ion	11/3/05		Application	No.	174			
Resource Conse	rvation	Agreement:	greement: Yes		Date Signed: May 9,2006 Acres 12				
Location of Proj	perty	Box Canyon		AP#: Various					
		Along the N	orth American	Cutoff Road					
Report and Plan	Prepa	red by*	Dale dean						
Proxy: Name	Phil	Sherman, Haw	ks & Assoc.	Signature	Mr.	Fishback	Date	11/03/05	
Landowner(s)	MM	July	W						
()				SIGNATURES	•				
3. 4) yr Trlly 6-51-06				Signature					
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Date				Date					
Operator/Manager			Consultant Contractors						
			A ha	Anligh Sperman HANKS & ASSO.					
Signature			Signature						
				547	SENIOR ENGINEER				
Date			Title	Title					
				06-2/-06 Date					
				Date					
d	~//	7 VENTURA	COUNTY R	ESOURCE COM	NSERV	VATION DISTRIC	СТ		
Hana Kall				6- <i>ê</i>	21-06				
Gary Ball, President			Date						
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ohn DeBoni Sec	retary			Date	1				
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Dale Dean, Distri	et Engir	neer		Date					
				COUNTY PUB					

HILLSIDE EROSION CONTROL PLAN INDEX

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 - 4. Vegetation
 - 5. Precipitation
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HILLSIDE EROSION CONTROL PLAN

The Hillside Erosion Control Plan is to assist landowners with the Hillside Erosion Control Ordinance (HECO) #3539 and #3683. The ordinances relate to the control of water quality, soil erosion and sedimentation of new agricultural hillside developments.

The portion of land falling under the HECO will be referred to as the "HECO property" or the "HECO area" for the remainder of this plan. Attachments are found in Chapter V of this HECO Plan unless otherwise stated.

The purpose of this plan is to protect the resource base and address the development of 125 acres of grazing land for a Registered Arabian Horse and Angus Cattle Livestock Breading Operation. The property has experienced fire burn over in 2005 and access to the property has been improved for Ventura County Fire Department Access from Box Canyon.

CHAPTER I. PHYSICAL LAND CONDITION REPORT

A. Location of Property

Property owner: Mr. B. Wayne Fishback

Property location: South/East of Simi Valley along the North American Cut Off. The **Thomas Guide**, (Attachment #1) shows the directions to the property from Box Canyon. Property description: The total parcels owned consist of 125 acres zoned for Open Space. Three portions of the property's steep canyons will be filled to provide animal safety and provide grazing areas.

1. Critical Area Reference

The Ventura County Erosion/Landslide Hazard Map designates properties with a severe to very severe erosion hazard by the number "48". This "48" designation is the reference/criteria for a hillside plan under the Ventura County Ordinance #3539. Properties without this erosion hazard are designated with a "13". As shown on the Ventura County Erosion /Landslide Hazard Map, (Attachment #2), this property falls within a "48" area. The other items that make this parcel a HECO is the import of 26,000 cubic yards (more-or-less) of inert fill material. The landowner has applied and been accepted under the HECO provisions by the Ventura County Resource Conservation District (VCRCD).

This potentially erodable area being treated will improve the resource base. The use of vegetative practices will help reduce sheet, rill and gully erosion. Conservation practices will also assist in fire control in this remote area.

2. Watershed

The proposed development being orchestrated by the landowner <u>will not</u> significantly alter the overall drainage pattern within the designated watershed. All practices have been outlined to minimize erosion within the field. Peak flow from a new fill area will slightly

increase the peak flows, but use of ground cover will help reduce velocity and surface erosion. The specified vegetative measures and drainage system under proper maintenance will provide the sub-systems necessary to sustain the resource for its intended land use. All surface runoff under this plan will discharge flows from open drainage systems to existing safe water drainage system. While this property is located at the top of the watershed with relatively small drainage in the HECO Plan Fill Areas, operations during rain events will require the implementation of Storm Water Pollution Control Plan measures to keep sediment on the property. Standard practices will be forwarded.

B. Descriptive Information

1. Topography

The property is on the border between two Quadrangle Maps, Santa Susan Pass and Calabasas. The topography is shown in Arch View 3.3 (Attachment #3).

2. Soils - Geology

Soils: The United States Department of Agriculture, Natural Resources Conservation Service, Survey of the Ventura Area, serves as the reference for soil information. The soil data can interpret information regarding vegetative groups, land capability units, erosion hazards, soil properties and interpretations.

The Arch View 3.3 Aerial Photo (Attachment #4) delineates the soil series of the property as Sedimentary Rock Land, Map Symbol (SnG). An excerpt from the Survey, page 53, is on the back of the map for easy reference and summarized in the table below.

Map	Soil Type	Capability	% Slopes	Hydro
Symbol		Unit		Group
SnG	Sedimentary rock land	IIIVs-1	> 2/1	D

Geology:

Landslides: The Critical Erosion Hazard Map and Landslide Hazard Map (Attachment #2) shows the areas of concern in the immediate area.

The **Dibble Aerial Geological Map** (Attachment #5) shows the location of the HECO area and identifies it as "Chatsworth Formation". The **Geologic Legend** for the HECO Area is shown on the map. These **Geologic Descriptions** explains the formation, lithology, topographic expression, soil development and characteristics of the area. The C.G.E. has outlined preliminary slope stability calculations that are shown in Chapter III.

3. Land Use

The USDA/NRCS soil classification system rates Land Use Capability (LUC) Classification based on a scale starting with "I" being the best to "VIII" having the severest land capability limitation.

The major Land Use Capability (LUC) Classification for this soil series is VIIIs-1 Igneous Rock Land. Excerpts from USDA "Soil Survey Ventura County, California" issued in April of 1970, outlines the Capability Unit of this soil series descriptions as

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follows: The Capability Unit also applies to the Sedimentary rock land on the subject property.

This unit consists of Igneous rock land, Pits and dumps, and Sedimentary rock land.

Generally these land types are suitable only for watershed. They should not be used for range.

The major limitations are the shallowness of the soil material and the erosion hazard. Fire protection is most important, not only in the management of these areas but also for the protection of downstream areas. Sanitary land fills and dumps make good parks and recreational areas if covered with good topsoil.

Recent Statutes for "Reuse" of inert materials has made this project viable. The low cost of these diverted materials avoids land fill fees and extends the life of these limited public facilities.

4. Vegetation

The current vegetation consists mostly of natural annual grasses with various forbs and shrubs. Clearing of vegetation on the planned fill areas is scheduled after HECO Plan approval per engineering specification.

5. Precipitation

Runoff: The amount of runoff using Isopluvial maps for a 10 year - 6 hour storm and 10 year - 24 hour storm would result in a type I storm. The peak discharge from the developed area and capacity for installed structures can be found in the hydrology data in the Engineering Section for structures (Chapter III).

Infiltration: The Sedimentary rock land (SnG) Series Hydrologic Group is D. Hydrologic Group D soils have a slow infiltration rate when thoroughly wetted and consisting chiefly of thin soils over impervious rock layers.

6. Erosion

This Sedimentary rock land does not reference a loss per acre per year. Constants, common for other mapping units, are not made available in the survey. While erosion is evident, the Universal Soil Loss Equation can not be used for this Soil Series.

7. Other Special Situation or Hazards

Importing of materials will bring truck traffic to the area which has an impact on local road ways.

An offsite sediment basin was constructed "off site" and communication has been received from the neighbor approving this activity.

Previous fill completed on the parcels assumed exemption under the HECO 10%, Article 2.011a, which resulted in complaints and a "Cease and Desist" order from Ventura County Environmental Health Department.

Arch View 3.3 Aerial and Typical Site Pictures of the new fill areas are shown in (Attachment 6)

CHAPTER II. EROSION CONTROL PLAN

CONSERVATION PRACTICES PROPOSED/RECOMMNEDED

The subject property is in the Calleguas Watershed. The Agricultural Community and Local Water Agencies are striving to reduce the Total Maximum Daily Loads (TMDL's) with out regulatory control. Together these entities are cooperating with the Los Angeles Water Quality Control Board to achieve the target levels through an "Ag Waiver" which will require the cooperation of all landowners. The practices in this plan will improve the conservation performance of these parcels and have a positive affect on this objective. Additionally, the erosion control practices outlined will assist in the protection of "down stream" properties. Fire control in this area is an important element in downstream impacts. Schedule of work is planned to begin June 2006 and be completed in one year.

1. Summary of Best Management Practices (BMP's)

These BMP's are necessary to implement the HECO conservation potion of the plan. Note that mulch is recommended and added to the specification but required in this plan to meet conservation objectives.

Management Practices	NRCS Practice Number	Attachment
Cover Crop	340	Chapter II
Residue Management	344	Chapter II
Nutrient Management	590	Chapter II
Pesticide Management	595A	Chapter II
Irrigation Management	449	Chapter II
Mulching (Recommended but not req'd)	484	Chapter II

2. RESOURCE MANAGEMENT SYSTEMS PROPOSED

Conservation treatment is to be planned and implemented as a Resource Management System (RMS), within the HECO area. RMS is a combination of interrelated conservation practices or groups of practices (subsystems) and management techniques identified by the primary use of soil and water. The objectives of the RMS are to achieve acceptable levels of quality for sustained use of the resource or its improvement. The RMS, at a minimum, protects the resource base when properly installed and maintained. This addresses acceptable water quality, the balance of plants and animals, and productive capability of the improvement.

The Resource Management System includes the following subsystems and individual conservation practices such as Vegetative, Management and Engineering Practices.

EROSION CONTROL SUBSYSTEM:

Existing Access Road - will be graded to handle the drainage water in a non-erosive manner.

Cover Crop - a variety of annual grasses such "Zorro" fescue will be allowed to mature and shatter seed in order establish a vegetative cover for the succeeding winter months. Mow or shed stocks, but leave residue and vegetative crown and roots in place to reduce

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erosion until the new vegetation is re-established. The "Zorro" Fescue is an NRCS Recommendation. However, since the objective is for year round grazing, a substitution can be made with notification and confirmation that an 80% cover can be obtained. **Erosion Control Seed Mix**—Time of Application – These practices will be implemented at any time between September 15, 2005 and November 2005. Zorro Fescue should be seeded at a minimum rate of 6 lb/acre.

SOIL MANAGEMENT SUBSYSTEM:

Crop Residue Use - will consist of trimmings and vegetative litter produced by flushes of growth, as well as residue produced by the cover crop after it matures. The crop residue can be mechanically or hand chopped, but will remain on the surface as protective surface mulch.

IRRIGATION WATER MANAGEMENT SUBSYSTEM:

Irrigation System and Irrigation water Management – can be addresses by an appropriately designed irrigation system and appropriate water application according to the crop's needs. Sprinkler systems should be adjusted for coverage, and timed with seasonal adjustment so as to minimize runoff.

EXCESS WATER REMOVAL SUBSYSTEM:

Grassed Waterway- This system will be used at the lower reaches to convey water away from the grazing areas during heavy rains.

WATER QUALITY SUBSYSTEM:

Nutrient, Pesticide and Irrigation Water Management – this can be addressed by plant nutrient applications, pest control methods and appropriate water application according to the crop's needs. These practices impact the TMDL performance in the watershed with is under mandated improvement actions directed by the Los Angeles Regional Water Quality Control Board.

3. MAINTENANCE:

Maintenance procedures are required to maintain the installed conservation practices in a condition sufficient to perform their intended function. Each conservation practice will require its own particular kind of routine maintenance.

EROSION CONTROL SUBSYSTEM:

Access Roads - Monitor for rills and ruts and do maintenance by re-grading as necessary. Maintain the cross slope. Avoid using the roads during wet, muddy periods. The existing access road will be graded to eliminate sheeting and control the water to safe natural waterways.

Cover Crop - The cover crop can be mowed, shredded and swathed. Allow the crown of the plants to remain in tact. During spring growth, the annual cover crop needs to be allowed to set and shatter seed for each successive year's ground cover. As a general rule, short season grasses and legumes tend to mature in late April or early May. Other maintenance procedures would include weed control. The occasional reseeding of weak

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spots may be necessary to maintain adequate cover. Again, the grazing schedule should be considered when selecting the cover crop. It is important to prevent "over grazing".

SOIL MANAGEMENT SUBSYSTEM:

Crop Residue Use - It is important to leave sufficient litter on the surface in order to protect the soil surface the following the fall season and allow re-seeding of selected vegetation. Imported mulch also recommended.

IRRIGATION WATER MANAGEMENT SUBSYSTEM:

Irrigation System and Irrigation water Management — Replace any broken lines or nozzles in the irrigation system. Apply the water to the crop according to the crop's needs.

EXCESS WATER REMOVAL SUBSYSTEM:

Grassed Waterway or ditch -Vegetation should be established before peak runoff occurs. The grassed waterway may require supplemental irrigation.

WATER QUALITY SUBSYSTEM:

Nutrient, Pesticide and Irrigation Water Management – apply plant nutrients, pest control irrigation water as mentioned in the Conservation Plan.

4. SUMMARY COMMENTS

The objective is to protect the resource base and develop a sustainable pasture for the breeding operation. And also by addressing sediment and drainage concerns through the use of essential and needed conservation management and engineering practices. Ultimately, the landowner or land manager will be responsible for implementation of the recommended management and engineering practices. The Landowner is a voluntary cooperator.

This land capability is historically limited in its productivity as described in Chapter I. State of California mandated "Diversion" of inert materials from demolition sites greatly reduces the cost of development and positively extends the life of operating dump sites. The Ventura County RCD limits the number of listed inert materials to clean, stable items that can be engineered for stability and enhance the agricultural base.

NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

COVER CROP (Acre) CODE 340

DEFINITION

Grasses, legumes, forbs, or other herbaceous plants established for seasonal cover and conservation purposes.

PURPOSES

- Reduce erosion from wind and water
- Increase soil organic matter
- Manage excess nutrients in the soil profile
- Promote biological nitrogen fixation
- Increase biodiversity
- Weed suppression
- ♦ Provide supplemental forage
- Soil moisture management

CONDITIONS WHERE PRACTICE APPLIES

On all lands requiring vegetative cover for natural resource protection

CRITERIA

General Criteria Applicable To All Purposes

Plant species, seedbed preparation, seeding rates, seeding dates, seeding depths, and planting methods will be consistent with approved local criteria and site conditions.

The species selected will be compatible with the nutrient management and pest management provisions of the plan.

Cover crops will be terminated by harvest, frost, mowing, tillage, and/or herbicides in preparation for the following crop.

Herbicides used with cover crops will be compatible with the following crop

Cover crop residue will not be burned

Provide supplemental fertilization to account for expected crop need and considering existing fertility or nutrient deficits.

Additional Criteria to Reduce Erosion From Wind and Water

Cover crop establishment, in conjunction with other practices, will be timed so that the soil will be adequately protected during the critical erosion period(s).

Plants selected for cover crops will have the physical characteristics necessary to provide adequate protection.

The amount of surface and/or canopy cover needed from the cover crop shall be determined using current erosion prediction technology.

Additional Criteria to Promote Biological Nitrogen Fixation

The specific Rhizobia bacteria will either be present in the soil or the seed will be inoculated at the time of planting legumes.

Nitrogen credits from legume cover crops will be accounted for in the nutrient management plan.

Additional Criteria to Manage Excess

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Nutrients in the Soil Profile

Cover crops will be established and actively growing before expected periods of high precipitation that can cause leaching.

Cover crop species will be selected for their ability to absorb large amounts of nutrients from the rooting profile of the soil.

The aboveground biomass will be removed from the field for maximum nutrient removal efficiency.

Additional Criteria to Increase Soil Organic Matter

Cover crop species will be selected on the basis of producing high volumes of organic material to maintain or improve soil organic matter.

Where applicable, the NRCS Soil Conditioning Index (SCI) procedure will be used to determine the amount of biomass required.

The cover crop will be terminated as late as feasible to maximize plant biomass and still prepare the seedbed for the subsequent crop.

<u>Additional Criteria to Increase</u> Biodiversity

Cover crop species shall be selected that, have different maturity dates, attract beneficial insects, serve as a trap crop for damaging insects, and/or provide food and cover for wildlife habitat management.

Additional Criteria for Weed Suppression

Species for the cover crop will be selected for their chemical or physical competition with weeds.

Cover crops residues will be left on the soil surface to maximize allelopathic (chemical) and mulching (physical) effects.

For long-term weed suppression, perennials and/or biennial species can be used.

Additional Criteria to Provide Supplemental Forage

Species selected will have desired forage traits, be palatable to livestock, and not interfere with the production of the subsequent crop.

Forage provided by the cover crop may be haved or grazed as long as sufficient biomass is left for resource protection.

Additional Criteria for Soil Moisture Management

Terminate growth of the cover crop sufficiently early to conserve soil moisture for the subsequent crop.

Cover crops established for moisture conservation shall be left on the soil surface until the subsequent crop is planted.

In areas of potential excess soil moisture, allow the cover crop to grow as long as possible to optimize soil moisture removal.

CONSIDERATIONS

The cover crop should be terminated as late as feasible to maximize plant growth and still prepare the seedbed for the subsequent crop.

Deep-rooted species provide maximum nutrient recovery.

Consider that grasses utilize more soil nitrogen, and legumes utilize both nitrogen and phosphorus.

Avoid cover crop species that attract potentially damaging insects.

Seek cover crop species that support beneficial insects.

Acceptable benefits, for most purposes, are usually accomplished when the plant density is at least 25 stems per feet, the combined canopy and surface cover is at least 60 percent, and the above ground (dry weight) biomass production is at least 2700 lb/acre.

Cover crops may be used to improve site conditions for establishment of perennial species.

Cover Crop - Mowed

Plants provide long-term cover and are managed by mowing to maintain at least 60 percent ground cover during the erosive period. Mowing to a 3-4 inch height at the beginning of the frost season can reduce cold temperature damage in orchards and vineyards. Mowing intervals must allow adequate seed production by annual species. Tree and vine rows are generally kept weed free with herbicides or other means to minimize competition and allow soil warming. Selected plants need to complement the Integrated Pest Management (IPM) program being used. Mowed cover crops greatly reduce dust during harvest operations, especially almonds and walnuts, and improve the infiltration rate of water.

Cover Crop - Disked

Plants provide long-term cover and are managed by disking after seed production to maintain at least 60 percent ground cover during the erosive period. Mowing at the beginning of the frost season may be performed to a 3-4 inch height to reduce cold temperature damage in orchards and vineyards. Tree and vine rows may be kept free of plants with herbicides or other means to reduce competition and allow soil warming.

Cover Crop - Unmowed and Nondisked

Plants provide long term cover on lands left idle for several years and are managed as natural stands without mowing or tillage to maintain at least 60 percent ground cover during the erosive period. Firebreaks shall be considered and mowed firebreaks used where feasible. Wildlife needs shall be considered when selecting plants. Control of noxious weeds may require mowing parts of the field for a few seasons.

The horizontal indentations left by tracked equipment provides a suitable seedbed on steep slopes.

Control of noxious weeds by mowing should be evaluated as an alternative to use for herbicides.

Endangered Species Considerations

Determine if installation of this practice with any others proposed will have any effect on any federal or state listed Rare, Threatened or Endangered species or their habitat. NRCS's objective is to benefit these species and others of concern or at least not have any adverse effect on a listed species. If the Environmental Evaluation indicates the action may adversely affect a listed species or result in adverse modification of habitat of listed species which has been determined to be critical habitat, NRCS will advise the land user of the requirements of the Endangered Species Act and recommend alternative conservation treatments that avoid the adverse effects. Further assistance will be provided only if the landowner selects one of the alternative conservation treatments



for installation; or at the request of the landowners, NRCS may initiate consultation with the Fish and Wildlife Service. National Marine Fisheries Service and/or California Department of Fish and Game. If the Environmental Evaluation indicates the action will not affect a listed species or result in adverse modification of critical habitat, consultation generally will not apply and usually would not be initiated. Document any special considerations for endangered species in the Practice Requirements Worksheet.

Some species are year-round residents in some streams, such as, freshwater shrimp. Other species, such as steelhead and salmon, utilize streams during various seasons. Be aware that during critical periods, such as spawning, eggs in gravels, and rearing of young may preclude activities in the stream that may directly affect the stream habitat during those periods. For example there should be no disturbance of stream gravel beds that may have eggs in them. That could include any equipment in the stream or even walking in the stream or work upstream that may result in sediment depositing in the gravel beds. Document any special considerations for endangered species in the Practice Requirements Worksheet.

Water Quantity

The practice may decrease runoff and increase infiltration and available soil moisture because of the increased period of vegetation. Increased organic material may increase water-holding capacity. Transpiration may increase because of increased water use by vegetation. Soil moisture may increase because of an increased ability to trap snow where climatically feasible.

Effects on the water budget, especially on volumes and rates of runoff, infiltration.

- evaporation, transpiration, deep percolation, and ground water recharge.
- 2. Effects of vegetation on soil moisture.

Water Quality

Erosion, sediment and adsorbed chemical yields could be decreased in conventional tillage systems because of the increased period of vegetal cover. Plants will take up available nitrogen and prevent its undesired movement. Organic nutrients may be added to the nutrient budget reducing the need to supply more soluble forms. Overall volume of chemical application may decrease because the vegetation will supply nutrients and there may be allelopathic effects of some of the types of cover vegetation on weeds. Temperatures of ground and surface waters could slightly decrease.

- Filtering effects of vegetation on movement of sediment, pathogens, and dissolved and sediment-attached substances.
- 2. Effects of growing and decaying vegetation on nutrients in the root zone.
- 3. Effects on erosion and the movement of sediment, pathogens, and soluble and sediment-attached substances carried by runoff.

PLANS AND SPECIFICATIONS

Plans and specifications will be prepared for each field and include seedbed preparation, date of seeding, seed mixture, fertilization, management, and time and manner of incorporating the crop into the soil.

When seed will be planted more than one inch deep, indicate the depth on the Practice Requirements sheet. When seeding on graded, irrigated fields will not be performed across the slope, indicate this on the Practice Requirements sheet. Use aerial seeding on steep sites and on other sites where full coverage is needed.

On fields judged to contain a good seed supply of desirable species, do not specify any seeding mixture on the Practice Requirements sheet. Fertilizer must still be specified on the Practice Requirements sheet unless existing fertility of the field is judged adequate.

On Conservation Reserve Program fields in MLRAs and locations not restricted to perennials, specify Cover Crop - unmowed and non-disked. Also list the desirable resident species on the Practice Requirements sheet that will qualify as part of the minimum 60 percent ground cover. Do not list any noxious weeds.

OPERATION AND MAINTENANCE

Maintenance needed for this practice includes mowing at the beginning of the frost season to minimize danger to trees and vines, allowing long term cover crops to set seed, maintaining adequate vegetative cover during the critical erosion period, controlling noxious weeds, and timing operations to minimize impacts on wildlife.

Firebreaks will be installed each season to protect unmowed and nondisced long-term cover on lands left idle and managed as natural stands.



NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE SPECIFICATION

340B - COVER CROP

I. SCOPE

The work shall consist of furnishing all materials and placing them on all designated areas to the limits as shown on the drawings, or as staked in the field, and performing cultural operations to grow the crop and to maintain the life of the stand.

II. MATERIALS

Seed

All seed shall be delivered to the site tagged and labeled in accordance with the California Agricultural Code, and shall be acceptable to the County Agricultural Commissioner.

Bag tag figures will be evidence of purity and germination. Time since date of seed test shall not exceed 9 months.

Seed shall be of a quality that weed seed shall not exceed 0.5% of the aggregate of pure live seed (PLS) (% germination x % purity) and other material.

Fertilizer

Unless otherwise specified on the Practice Requirements sheet, all fertilizer shall be Ammonium Phosphate Sulfate containing a minimum of 16% Nitrogen, 20% available phosphoric acid and 0% water soluble potash plus about 15% sulfur and be uniform in composition, dry and free flowing, pelleted or granular.

All fertilizer shall be labeled in accordance with applicable state regulations and bear the warranty of the producer for the grade furnished.

Inoculants

The inoculant for treating legume seeds shall be a pure culture of Nitrogen fixing bacteria prepared specifically for the plant species and shall not be used later than the date indicated on the container. A mixing medium, as recommended by the manufacturer or approved substitute, shall be used to bond the inoculant to the seed. For nonpellet inoculated seed, two times

the amount of the inoculant recommended by the manufacturer shall be used and seed shall be sown within 24 hours.

For pellet inoculated seed, at least 30 pounds of inoculant shall be used per 1,000 pounds of raw seed and the seed shall be labeled to show the Lot Number, Expiration Date, and Percent Coat of the finished product. Pellet inoculated seed shall be kept cool and sown within 180 days.

Chemicals

All pesticides used in performing this practice shall be Federally, State, and locally registered and shall be applied strictly in accordance with authorized and registered uses, directions on the label, and other Federal or State policies and requirements. Chemical containers shall be properly stored and disposed of in a safe manner.

III. SEEDING MIXTURE AND PLANTING DATE

The seed(s) and rate(s) specified on the Practice Requirements sheet shall be used.

The seeding rate(s) shall be the weight exclusive of any coating material. Any legume seed used shall be inoculated. Based on bag tags, seeding rates shall be adjusted to insure the required amounts of pure live seed.

Planting shall be performed during the period that is specified on the Practice Requirements sheet.

IV. SEEDBED PREPARATION

The area to be planted shall be weed free and have a firm seedbed which has previously been roughened by scarifying, disking, harrowing, chiseling, or otherwise worked to a depth of 2 to 4 inches, except when planting no-till or otherwise specified on the Practice Requirements sheet. No implement shall be used that will create an excessive amount of downward movement of clods on sloping areas.

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Seedbed preparation shall be suspended when soil moisture conditions are not suitable for obtaining a satisfactory seedbed.

V. FERTILIZING AND SEEDING

Fertilizing

Fertilizer shall be distributed uniformly over the seedbed at the rate of 250 pounds per acre unless a different amount is specified on the Practice Requirements sheet.

Fertilizer shall be applied in any way that will result in uniform distribution. The fertilizer shall be incorporated into the soil. Incorporation may be as part of the seedbed preparation, or as part of the seeding operation unless otherwise specified on the Practice Requirements sheet.

Seeding

Seed shall be drilled or broadcast by hand, mechanical hand seeder, or power operated seeder. Seed shall be incorporated into the soil, but not more than I inch deep unless otherwise specified on the Practice Requirements sheet.

Seeding shall be performed as nearly as practical across the slope unless otherwise specified on the Practice Requirements sheet.

VI. IRRIGATION

When specified, irrigation water shall be applied during the establishment period at the times and rates listed on the Practice Requirements sheet.

VII. ADDITIONAL CULTURAL OPERATIONS

Only one of the following subsections shall apply as specified on the Practice Requirements sheet.

A - Mowed Cover Crop Management

The types of equipment used and the cultural operations performed shall maintain a population of planted and/or desirable resident species not including any noxious weeds that provides at least 60 percent ground cover during the erosive period. The desirable resident species are those specified on the Practice Requirements sheet. Mowing shall control plant height. No tillage shall be performed except for injecting or banding fertilizer through knives.

Last mowing prior to seed maturity of annual species shall be performed prior to the date specified on the Practice Requirements sheet. Mowed height prior to seed maturity shall not be lower than the height shown on the Practice Requirements sheet.

Herbicides used shall not endanger the planted species except that tree and vine rows may be kept free of unwanted vegetation or when required for control of noxious weeds.

B - Disked Cover Crop Management

The types of equipment used and the cultural operations performed shall maintain a plant population of planted and/or desirable resident species not including any noxious weeds that provides at least 60 percent ground cover during the erosion period. The desirable resident species are those specified on the Practice Requirements sheet. Plant height may be controlled by mowing. No tillage shall be performed prior to seed maturity of annual species except for injecting or banding fertilizer through knives.

Herbicides used shall not endanger the planted species except that tree and vine rows may be kept free of unwanted vegetation or when required for control of noxious weeds.

If mowing is performed prior to seed maturity of annual species, the last mowing shall be prior to the date specified on the Practice Requirements sheet. Mowed height prior to seed maturity shall not be lower than the height shown on the Practice Requirements sheet.

C - Unmowed and Nondisked Management

Cultural operations performed shall maintain a population of planted and/or desirable resident species not including any noxious weeds that provides at least 60 percent ground cover during the erosive period. The desirable resident species are those specified on the Practice Requirements sheet. No mowing shall be performed except when required for control of noxious weeds or for a designated firebreak. No tillage shall be performed except for injecting or banding fertilizer through knives.

Herbicides used shall not endanger the planted species, except when required for control of noxious weeds.

NRCS, CA July, 2000

VIII. OTHER REQUIREMENTS

Other details for the establishment and maintenance of the plants including, but not limited to, the need for livestock and traffic control shall be applied when specified on the Practice Requirements sheet.

Measures and methods that enhance fish and wildlife values, protect visual resources, and maintain key shade, food, and den trees shall be performed when specified on the Practice Requirements sheet.

Operations shall be done in such a manner that erosion and air and water pollution are minimized and held within legal limits.

The owner, operator, contractor, or other persons shall conduct all work and operations in accordance with proper safety codes for the type of equipment and operations being performed with due regards to safety of all persons and property.

NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE SPECIFICATION

344 - RESIDUE MANAGEMENT, SEASONAL

I. SCOPE

The work shall consist of spreading crop residue over cultivated fields to conserve moisture, increase infiltration, reduce soil erosion, and to improve soil tilth.

II. MATERIALS

Chemicals used in performing this practice shall be Federally, State, and locally registered and shall be applied strictly in accordance with authorized registered uses, directions on the label, and other Federal, State and local policies and requirements.

Chemical containers shall be properly stored and disposed of in a safe manner according to state and local ordinances or procedures.

III. CULTURAL OPERATIONS

In rainfall erosion areas, plants or crops shall be managed to maintain adequate surface residues during the critical erosion periods but there will be less than 30 percent residue cover remaining after planting.

In wind erosion areas, plants or crops shall be managed to maintain adequate surface residues during the critical wind erosion periods but there will be less than 1000 pounds per acre of flat, small grain residues equivalent on the surface.

Trees and vines shall be managed to maintain shreddable prunings and leaf residue on the soil surface during the critical erosion periods.

Spread all crop residues, including orchard and vineyard prunings, uniformly, and do not burn or remove residues except for large limbs. Shred or chop coarse residues as necessary for field management.

When residues are incorporated, the operation will achieve good soil contact with more than half the residues.

IV. FERTILITY MANAGEMENT

Apply nitrogen to avoid nitrogen deficiency symptoms in crops that immediately follow incorporation of residues having C:N ratios of 30:1 or higher that are turned under or incorporated into the plow layer.

V. OTHER REQUIREMENTS

The owner, operator, contractor, and other persons shall conduct all work and operations in accordance with proper safety code for the type of equipment and operations being performed with due regard to safety of all persons and property.



NATURAL RESOURCES CONSERVÁTION SERVICE CONSERVATION PRACTICE STANDARD

NUTRIENT MANAGEMENT (Acre) CODE 590

DEFINITION

Managing the amount, source, placement, form and timing of the application of nutrients and soil amendments.

PURPOSES

- To budget and supply nutrients for plant production.
- To properly utilize manure or organic byproducts as a plant nutrient source.
- To minimize agricultural nonpoint source pollution of surface and ground water resources.
- To maintain or improve the physical, chemical and biological condition of soil.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies to all lands where plant nutrients and soil amendments are applied.

CRITERIA

General Criteria Applicable to All Purposes

Plans for nutrient management shall comply with all applicable Federal, state, and county laws, such as Clean Water Act and CEQA.

Plans for nutrient management shall be developed in accordance with policy requirements of the NRCS General Manual Title 450, Part 401.03 (Technical Guides, Policy and Responsibilities) and Title 190, Part 402 (Ecological Sciences, Nutrient Management, Policy); technical requirements of the NRCS Field Office Technical Guide (FOTG); procedures contained in the National Planning Procedures Handbook (NPPH), and the NRCS National Agronomy Manual (NAM) Section 503.

Persons who review or approve plans for nutrient management shall be certified using the procedure found in 180 GM part 409. Plans for nutrient management that are elements of a more comprehensive conservation plan shall recognize other requirements of the conservation plan and be compatible with its other requirements.

A nutrient budget for nitrogen shall be developed that considers all potential sources of nutrients including, but not limited to animal manure and organic by-products, waste water, commercial fertilizer, crop residues, legume credits, and irrigation water. A nutrient budget for phosphorus is required for fields rated "Medium" or higher risk using the P Index. Budgets for P and K may be prepared to illustrate excessive or inadequate agronomic application rates, as needed.

Realistic yield goals shall be established based on soil productivity information, historical yield data, climatic conditions, level of management and/or local research on similar soil, cropping systems, and soil, tissue, and manure/organic by-products tests. For new crops or varieties, industry yield recommendations may be used until documented yield information is available.

Plans for nutrient management shall specify the form, source, amount, timing and method of application of nutrients on each field to achieve realistic production goals, while minimizing nitrogen and/or phosphorus movement to surface and/or ground waters.

Erosion, runoff, and water management controls shall be installed, as needed, on fields that receive nutrients.

Soil Sampling and Laboratory Analysis (Testing)

Nutrient planning shall be based on current soil, tissue, water, manure, and organic byproducts test results developed in accordance with University of California guidance or industry practice if recognized by the University of California. Current soil tests for P and K are those that are no older than three years. Soil tests for N will be taken as required by the plan. Soil samples shall be

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collected and prepared according to the University of California guidance or standard industry practice. Test analyses shall be performed by laboratories that are accepted in one or more of the following programs:

- Environmental Laboratory Accreditation
 Program (ELAP),
 http://www.dhs.ca.gov/ps/ls/elap/elapindex.htm
- The North American Proficiency Testing Program (Soil Science Society of America), http://tal.agsci.usu.edu/~tal/soil.science/usual/aglab.pt/California.html, or
- Laboratories whose tests are accepted by the University of California.

Soil testing shall include analysis for any nutrients for which specific information is needed to develop the nutrient plan. Request analyses pertinent to monitoring or amending the annual nutrient budget, e.g. pH, electrical conductivity (EC), soil organic matter, nitrogen, phosphorus, and potassium.

Plant Tissue Testing

Tissue sampling and testing, where used, shall be done in accordance with University of California standards or recommendations or other methods approved by the University of California. Refer to UC Bulletin 1879

Nutrient Application Rates

Soil amendments shall be applied, as needed, to adjust soil pH to the specific range of the crop for optimum availability and utilization of nutrients. Consider practice 738 Soil Salinity Control and consult UC publications on soil amendments.

Recommended nutrient application rates shall be based on University of California guidelines (and/or industry practice when recognized by the university) and consider current soil or tissue test results, realistic yield goals, all nutrient sources, and management capabilities. Recommended applications shall be based on realistic yield goals and associated plant nutrient removal rates found in local UC research reports or those recognized by UC, UC published crop specific IPM Manuals and Production Manuals, or the Western Fertilizer Handbook where the above references are not available.

The planned rates of nutrient application, as documented in the nutrient budget, shall be determined based on the following guidance:

Nitrogen Application - Planned nitrogen application rates shall match the recommended rates as closely as possible, except when manure or other organic by-products are a source of nutrients. When manure or other organic by-products are a source of nutrients, see "Additional Criteria" below. Nitrogen application shall be undertaken using specific guidance contained in the plan, and considering all sections of this standard.

Phosphorus Application - Planned phosphorus application rates shall match the recommended rates as closely as possible and be applied according to the California P Index.

Use of the California Phosphorus Index

The P Index, located in Section I of the FOTG, will be used for evaluating P application with organic or commercial fertilizers. Refer to UC Bulletin 1879 for guidance on crop response thresholds and soil and tissue sampling methods. Initially use the "California P Index – Initial Risk Assessment" to determine the level of risk assessment needed based on P impacts on local surface waters. For all fields the following applies:

- 1) If the field is found to be in the Low or Medium Risk categories, commercial P fertilizers may be applied at agronomic rates according to University guidelines using P response thresholds for the crop, and utilizing soil and/or tissue analysis. Manure fertilizers may be applied based on the N requirement of the crop and the N content of the manure. Fields in the Medium Risk category should be periodically reviewed using the P Index since they may move into the High Risk category when no management changes are made. Medium and higher risk fields will require a P budget.
- 2) If the field is found to be in the High Risk category then manure may be applied at a P Based rate for crop removal. Estimate P removal from UC recognized locally available research, UC published IPM or Production Manuals, or the Western Fertilizer Handbook when the other sources are not available. Manure P content will be determined using laboratory analysis. Commercial fertilizer may be applied according to UC guidelines and P

response thresholds for the crop, utilizing soil and/or tissue analysis. A conservation plan must be in place that will lower the risk category to at least Medium when implemented. Medium and higher risk fields will require a P budget. After implementation the actions required at the lower risk levels will apply.

3) If the field is in the Very High Risk category of the P index no manure or other organic sources of P may be applied. Commercial fertilizer may be applied according to UC guidelines and P response thresholds for the crop, utilizing soil and/or tissue analysis. However, when soil test P levels meet or exceed 80 ppm (Olsen) or 120 ppm (Bray) no P from any source may be applied, except as provided for below. When planting winter vegetables in soils below 55 degrees Fahrenheit a starter fertilizer of 30 lbs/ac or less P2O5 may be injected at seeding. A conservation plan must be in place and being applied that will lower the risk level for the field to at least High Risk when implemented. Medium and higher risk fields will require a P budget. After implementation the actions required at the lower risk levels will apply.

When manure or other organic by-products are a source of nutrients, see "Additional Criteria" below.

Potassium Application - Excess potassium shall not be applied in situations in which it causes unacceptable nutrient imbalances in crops or forages that can not be managed by changes in animal feed rations. Supplements containing P that are used to manage excess dietary K should not be used when P is known to affect local surface water.

- Other Plant Nutrients The planned rates of application of other nutrients shall be consistent with diagnostic testing, knowledge of local micronutrient needs available at the UCCE office, published University of California guidance such as IPM or Crop Production Manuals, or industry practice if recognized by the University of California.
- Starter Fertilizers Starter fertilizers containing nitrogen, phosphorus and potassium may be applied in accordance with University

of California recommendations, as published in IPM or Production Manuals, other UC publications, or industry practice if recognized by the University of California. When starter fertilizers are used, they shall be included in the nutrient budget.

Nutrient Application Timing

Timing of nutrient application shall correspond as closely as possible to plant nutrient uptake characteristics, while considering cropping system limitations, manure mineralization, weather and climatic conditions, and field accessibility.

Nutrient Application Methods

Nutrients shall not be applied to frozen, snow-covered, or saturated soil if the potential risk for runoff or leaching exists. When practical, application methods will be chosen to minimize the risk of nutrient loss off site from runoff, leaching, or volatilization.

Nutrient applications associated with irrigation systems shall be applied in accordance with the requirements of Irrigation Water Management (Code 449).

Additional Criteria Applicable to Manure or Organic By-Products Applied as a Plant Nutrient Source

Nutrient values of manure and organic by-products (excluding sewage sludge) shall be determined prior to land application based on laboratory analysis when practical. For other circumstances, "book values" recognized by the NRCS or published in University of California bulletins or manuals, or historic records for the operation, if they accurately estimate the nutrient content of the material, may be substituted. Book values recognized by NRCS may be used when University of California does not have established values. NRCS recognized values are found in the Agricultural Waste Management Field Handbook, Chapter 4 - Agricultural Waste Characteristics, and the Western Fertilizer Handbook.

Nutrient Application Rates

Where not restricted by local ordinance, the application rate (in/hr) for manure or fertilizer applied through sprinkler irrigation shall not exceed the soil intake/infiltration rate as indicated by the



occurrence of runoff. Runoff from irrigation when applying fertilizer, manure, or by-products shall be contained on-farm. The total application shall not exceed that necessary to reach the field capacity of the soil. Assess the available storage space in the soil profile prior to application.

The planned rates of nitrogen and phosphorus application recorded in the plan shall be determined based on the following guidance:

Nitrogen Application - When the plan is being implemented on a phosphorus standard, manure or other organic by-products shall be applied at rates consistent with the phosphorus requirement of the crop. In such situations, an additional nitrogen application, from nonorganic sources, may be required to supply the recommended amounts of nitrogen.

Manure or other organic by-products may be applied on legumes at rates equal to the estimated removal of nitrogen in harvested plant biomass.

 Phosphorus Application - When manure or other organic by-products are used, the planned rates of phosphorus application shall be consistent with the Phosphorous Index.

Use of the California Phosphorus Index

The P Index, located in Section I of the FOTG, will be used for evaluating P application with organic or commercial fertilizers. Refer to UC Bulletin 1879 for guidance on crop response thresholds and soil and tissue sampling methods. Initially use the "California P Index – Initial Risk Assessment" to determine the level of risk assessment needed based on P impacts on local surface waters. For all fields the following applies:

1. If the field is found to be in the Low or Medium Risk categories, commercial P fertilizers may be applied at agronomic rates according to University guidelines using P response thresholds for the crop, and utilizing soil and/or tissue analysis. Manure fertilizers may be applied based on the N requirement of the crop and the N content of the manure. Fields in the Medium Risk category should be periodically reviewed using the P Index since they may move into the High Risk category when no management changes are made. Medium and higher risk fields will require a P budget.

- 2. If the field is found to be in the High Risk category then manure may be applied at a P Based rate for crop removal. Estimate P removal from locally available UC recognized research, UC published IPM or Production Manuals, or the Western Fertilizer Handbook when the other sources are not available. Manure P content will be determined using laboratory analysis. Commercial fertilizer may be applied according to UC guidelines and P response thresholds for the crop, utilizing soil and/or tissue analysis. A conservation plan must be in place that will lower the risk category to at least Medium when implemented. Medium and higher risk fields will require a P budget. After implementation the actions required at the lower risk levels will apply.
- 3. If the field is in the Very High Risk category of the P index no manure or other organic sources of P may be applied. Commercial fertilizer may be applied according to UC guidelines and P response thresholds for the crop, utilizing soil and/or tissue analysis. However, when soil test P levels meet or exceed 80 ppm (Olsen) or 120 ppm (Bray) no P from any source may be applied, except as provided for below. When planting winter vegetables in soils below 55 degrees Fahrenheit a starter fertilizer of 30 lbs/ac or less P2O5 may be injected at seeding. A conservation plan must be in place and being applied that will lower the risk level for the field to at least High Risk when implemented. Medium and higher risk fields will require a P budget. After implementation the actions required at the lower risk levels will apply.

A single application of phosphorus applied as manure may be made at a rate equal to the recommended phosphorus application or estimated phosphorus removal in harvested plant biomass for the crop rotation or multiple years in the crop sequence. When such applications are made, the application rate shall:

 not exceed the recommended nitrogen application rate during the year of application, or

- not exceed the estimated nitrogen removal in harvested plant biomass during the year of application when there is no recommended nitrogen application.
- be consistent with the P Index risk category of the field.

Field Risk Assessment

When a field is located in an area contributing P to a water body on the 303d list because of impacts of P from an agricultural source, and animal manure or other organic by-products are applied, a field-specific assessment of the potential for phosphorus transport from the field shall be completed. This assessment is appropriate in other situations when desired by the producer. This assessment may be done using the Phosphorus Index or other recognized assessment tool when developed. In such cases, plans shall include:

- a record of the assessment rating for each field or sub-field, and
- information about conservation practices and management activities that can reduce the potential for phosphorus movement from the site.

When such assessments are done, the results of the assessment and recommendations shall be discussed with the producer during the development of the plan.

Heavy Metals Monitoring

When sewage sludge is applied, the accumulation of potential pollutants (including arsenic, cadmium, copper, lead, mercury, selenium, and zinc) in the soil shall be monitored in accordance with the US Code, Reference 40 CFR, Parts 403 and 503, and/or any applicable state and local laws or regulations.

Additional Criteria to Minimize Agricultural Non-point Source Pollution of Surface and Ground Water Resources

In areas with identified or designated water quality impairment from agricultural P, such as 303d listing, an assessment shall be completed of the potential for phosphorus transport from the field. The Phosphorus Index (PI), or other recognized assessment tool when developed, may be used to make these assessments. The results of these assessments and recommendations shall be

discussed with the producer and included in the plan.

Where groundwater used for drinking, or other beneficial use impaired by nitrate, is at risk from nitrate leaching, management alternatives to minimize leaching will be developed and discussed with the producer. Areas of the farm with high leaching potential will be designated on the plan map. As necessary, management alternatives specific to these areas will be developed with the producer and included in the plan. Alternatives will consider both nitrogen management and irrigation water management.

When fertilizers or manure with high salt content are applied in a groundwater basin impacted by, or being protected from salinity, leaching will be limited to that needed to maintain the salinity level in the rootzone at the required level for crop productivity. Refer to UC Publication "Agricultural Salinity and Drainage, A Handbook for Water Managers", 1993, or FAO Irrigation and Drainage Paper #29 "Water Quality for Agriculture", or equivalent.

Plans developed to minimize agricultural nonpoint source pollution of surface or ground water resources shall include practices and/or management activities that can reduce the risk of nitrogen or phosphorus movement from the field.

Additional Criteria to Improve the Physical, Chemical, and Biological Condition of the Soil.

Nutrients shall be applied in such a manner as not to degrade the soil's structure, chemical properties, or biological condition. Use of nutrient sources with high salt content will be minimized unless provisions are used to leach salts below the crop root zone. Refer to UC Publication "Agricultural Salinity and Drainage, A Handbook for Water Managers", 1993, FAO Irrigation and Drainage Paper #29 "Water Quality for Agriculture", or equivalent.

Nutrients shall not be applied to flooded or saturated soils when the potential for soil compaction and creation of ruts is high.

CONSIDERATIONS

Consider induced deficiencies of nutrients due to excessive levels of other nutrients.

Consider additional practices such as Conservation Cover (327), Grassed Waterway (412), Contour Buffer Strips (332), Filter Strips (393), Irrigation Water Management (449), Riparian Forest Buffer (391A), Conservation Crop Rotation (328), Soil Salinity Control (738), Air Management (705), Irrigation Erosion Control (716), Cover Crop(340), and Residue Management (329A, 329B, or 329C, and 344) to improve soil nutrient and water storage, infiltration, aeration, tilth, diversity of soil organisms and to protect or improve water quality.

Consider cover crops whenever possible to utilize and recycle residual nitrogen.

Consider application methods and timing that reduce the risk of nutrients being transported to ground and surface waters, or into the atmosphere. Suggestions include:

- split applications of nitrogen to provide nutrients at the times of maximum crop utilization
- avoid or carefully plan fall or winter nutrient application for spring seeded crops to limit N loss from leaching, denitrification, and volatilization or P loss from erosion or runoff.
- band applications of phosphorus near the seed row
- apply materials uniformly to fields or as prescribed by precision agricultural techniques
- incorporate manure or organic by-products immediately after application
- delay field application of manure or other organic by-products if precipitation capable of producing runoff and erosion is forecast within 24 hours of the planned application.
- Consider foliar application of nutrients

Consider minimum application setback distances from environmentally sensitive areas, such as streams, wells, gullies, ditches, surface inlets or rapidly permeable soil areas. Refer to local ordinances or guidelines and the California Environmental Handbook.

Consider the potential problems from odors associated with the land application of manure, especially when applied near or upwind of residences.

Consider nitrogen volatilization losses associated with storage, handling, and land application of manure. Nitrogen losses can be significant. Ammonia volatilization can contribute to PM 2.5 during the winter in areas subject to atmospheric inversion layers and dense ground fog.

Consider denitrification losses of N from poorly drained soils.

Consider the potential to affect National Register listed or eligible cultural resources.

Consider using current year soil test information when developing or revising plans, particularly if manure is to be a nutrient source.

Consider annual reviews to determine if changes in the nutrient budget are desirable (or needed) for the next planned crop.

Consider other sampling techniques where useful or when special environmental circumstances exist. (For example: soil profile sampling for nitrogen, pre-sidedress nitrogen test, pre-plant soil nitrate test, or soil surface sampling for phosphorus accumulation or pH changes.)

Consider ways to modify the chemistry of animal manure, including modification of the animal's diet to reduce the manure nutrient content, to enhance the producer's ability to manage manure effectively.

PLANS AND SPECIFICATIONS

Plans and specifications shall be in keeping with this standard and shall describe the requirements for applying the practice to achieve its intended purpose(s), using nutrients to achieve production goals and to prevent or minimize water quality impairment.

The following components shall be included in the nutrient management plan:

- aerial photograph or map showing farm infrastructure and a soil map of the site,
- current and/or planned plant production sequence or crop rotation,
- results of soil, plant, water, manure or organic by-product sample analyses,
- realistic yield goals for the crops in the rotation,
- quantification of all nutrient sources,

- recommended nutrient rates, timing, form, and method of application and incorporation,
- location of designated sensitive areas or resources and the associated, nutrient management restriction,
- guidance for implementation, operation, maintenance, recordkeeping, and
- complete nutrient budget for nitrogen for the rotation or crop sequence.
- complete nutrient budget for phosphorus and potassium for the rotation or crop sequence, where required, as defined by this standard.

If increases in soil phosphorus levels are expected in a designated environmentally sensitive area, plans shall document:

- P Index rating for each field, and for fields rated Medium Risk or higher, alternative practices to address the expected increases.
- the relationship between soil phosphorus levels and potential for phosphorus transport from the field, and
- the potential for soil phosphorus drawdown from the production and harvesting of crops.

When applicable, plans shall include other practices or management activities as determined by specific regulation, program requirements, or producer goals.

In addition to the requirements described above, plans for nutrient management shall also include:

- discussion about the relationship between nitrogen and phosphorus transport and water quality impairment. The discussion about nitrogen should include information about nitrogen leaching into ground water and potential health impacts. The discussion about phosphorus should include information about phosphorus accumulation in the soil, the increased potential for phosphorus transport from the field, and the types of water quality impairment that could result from phosphorus movement into surface water bodies.
- discussion about how the plan is intended to prevent the nutrients (nitrogen and/or phosphorus) supplied for production purposes from contributing to water quality impairment.

 a statement that the plan was developed based on the requirements of the current standard and any applicable Federal, state, or local regulations or policies; and that changes in any of these requirements may necessitate a revision of the plan.

OPERATION AND MAINTENANCE

The owner/client is responsible for safe operation and maintenance of this practice including all equipment. Operation and maintenance addresses the following:

- periodic plan review to determine if adjustments or modifications to the plan are needed. As a minimum, plans will be reviewed and revised with each soil test cycle.
- Nutrient management plans are based on projected conditions and must be applied with flexibility. The producer must respond to changing circumstances using the principles included in this practice standard and the plan.
- protection of fertilizer and organic by-product storage facilities from weather and accidental leakage or spillage.
- calibration of application equipment to ensure uniform distribution of material at planned rates. Manure water volume should be estimated with 90% accuracy.
- documentation of the actual rate at which nutrients were applied. When the actual rates used differ from or exceed the recommended and planned rates, records will indicate the reasons for the differences.
- Maintaining records to document plan implementation. As applicable, records include:
 - soil test results and recommendations for nutrient application,
 - quantities, analyses and sources of nutrients applied,
 - · dates and method of nutrient applications,
 - crops planted, planting and harvest dates, yields, and crop residues removed,



- results of water, plant, and organic byproduct analyses, and
- dates of review and person performing the review, and recommendations that resulted from the review.

Records should be maintained for five years; or for a period longer than five years if required by other Federal, state, or local ordinances, or program or contract requirements. Records must be maintained by the producer and need not be maintained in NRCS files unless required to document required actions for payment under a contract. Other requirements may be associated with specific contract or program needs.

Workers shall be protected from and avoid unnecessary contact with chemical fertilizers and organic by-products. Protection should include the use of protective clothing when working with plant nutrients. Extra caution must be taken when handling ammonia sources of nutrients, or when dealing with organic wastes stored in unventilated enclosures. Contact the local Agricultural Commissioner for guidance.

The disposal of material generated when cleaning nutrient application equipment shall be accomplished properly and in accordance with local, state, or federal law. Excess material should be collected and stored or field applied in an appropriate manner. Excess material should not be applied on areas of high potential risk for runoff and leaching.

The disposal or recycling of nutrient containers should be done according to state and local guidelines or regulations.

NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE SPECIFICATION

590 - NUTRIENT MANAGEMENT

I. SCOPE

The work shall consist of managing the use of nitrogen and phosphorus for optimum forage and crop yields on fields designated on the conservation plan map or drawing.

II. GENERAL

A crop nitrogen use budget shall be developed for each crop in the crop rotation listed on the Practice Requirements sheet based on realistic yield goals.

Realistic yield goals shall be based on historic yield data and local fertilizer research findings.

Soil tests and/or plant tissue test shall be used unless otherwise specified on the Practice Requirements sheet

III. MATERIALS

Chemicals used in performing this practice shall be Federally, State, and locally registered and shall be applied strictly in accordance with authorized registered uses, directions on the label, and other Federal, State, and local policies and requirements.

Chemical containers shall be properly stored and disposed of in a safe manner according to state and local ordinances or procedures.

IV. USE OF NITROGEN IN GROUND WATER QUALITY CONCERN AREAS

This Section shall apply when specified on the Practice Requirements sheet.

Crops or cover crops with rooting depths and nutrient requirements that utilize nitrogen shall be grown unless otherwise specified on the Practice Requirements sheet.

When the nitrogen fixing crops are grown in a crop rotation, they shall be grown immediately prior to or interplanted with nitrogen depleting crops.

The amount of nitrogen being used shall not be considered excessive for the yield goal by UC Cooperative Extension.

Nitrogen shall be applied in two or more applications timed for the seasonal plant uptake needs and the availability of residual soil nitrogen, nitrogen in the irrigation water, and decaying crop residues and any animal wastes.

Other treatments needed for nitrogen management shall be performed when specified on the Practice Requirements sheet.

V. USE OF NUTRIENTS IN SURFACE WATER QUALITY CONCERN AREAS

This Section shall apply when specified on the Practice Requirements sheet.

The amounts of nitrogen and phosphorus being used shall not be considered excessive for the yield goal and soil type by UC Cooperative Extension.

Nitrogen shall be applied in two or more applications on irrigated fields timed for the seasonal plant uptake needs and the availability of nitrogen in the soil, in the irrigation water, and from decaying crop residues and any animal wastes.

Cultural operations, plant growth, and crop residues shall reduce the predicted rainfall sheet and rill erosion rate for the crop rotation or other land use to the soil loss tolerance identified for each field.

Irrigation tailwater shall be managed to minimize the amount of nitrogen and phosphorus leaving the farm or property.

In areas with an adopted surface water quality standard for nitrogen or phosphorus, additional erosion control practice shall be performed when specified on the Practice Requirements sheet.

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VI. OTHER REQUIREMENTS

The owner, operator, contractor, and other persons shall conduct all work and operations in accordance with proper safety codes for the type of equipment and operations being performed with due regard to the safety of all persons and their property.

Fertilizer application equipment shall be calibrated to ensure applied rates are within 10 percent of the planned rates.

Fertilizer materials shall be protected from weather and accidental leakage or spillage that would adversely affect soil resources or water quality.

STATEMENT OF WORK Nutrient Management (590)

These deliverables apply to this individual practice. For other planned practice deliverables refer to those specific Statements of Work.

DESIGN

Deliverables:

- 1. Design documents that demonstrate criteria in NRCS practice standard have been met and are compatible with planned and applied practices.
 - a. Practice purpose(s) as identified in the conservation plan.
 - b. List of required permits, if required, to be obtained by the client.
 - Practice standard criteria-related computations and analyses to develop plans and specifications including but not limited to:
 - i. Results of applicable sampling, analyses, and tests provided by the client.
 - ii. Realistic yield goals for the crop(s) to receive nutrient applications.
 - iii. Planned nutrient and soil amendment application rates, methods, and timing of application in balance with the nutrient budget.
 - iv. Site risk assessment for phosphorus transport when manure or other organic materials are a source of nutrients.
 - Other requirements applicable to manure or organic materials, non-point source pollution, soil condition, and air quality.
- 2. Written plans and specifications shall be provided to the client that adequately describes the requirements to implement the practice and obtain necessary permits. Plans & specifications include:
 - Maps that identify areas on which nutrients will be applied.
 - Location of setbacks or other sensitive areas with nutrient application restrictions.
 - c. Guidance for nutrient applications on setbacks or other sensitive areas.
 - A nutrient budget for nitrogen, phosphorus, and potassium that compares recommended to planned nutrient application rates,
 - e. Guidance for operation and maintenance plan.
 - f. Other requirements listed in the conservation practice standard Nutrient Management (Code 590).
- 3. Certification that the design meets practice standard criteria and complies with applicable laws and regulations.
- 4. Design modifications during installation as required.

INSTALLATION

Deliverables

- 1. Pre-implementation conference with client to review the plan
- 2. Verification that client has obtained required permits, if required for installation.
- 3. Location of and communication of setback requirements for wetlands, water bodies, streams, and other nutrient-sensitive areas.
- 4. Installation guidance as needed.
- 5. Facilitate and implement required design modifications with client and original designer.
- Advise client/NRCS on compliance issues with all federal, state, tribal, and local laws, regulations and NRCS policies during installation.
- 7. Certification that the application process and materials meets design and permit requirements.

STATEMENT OF WORK Nutrient Management (590)

CHECKOUT

Deliverables

- 1. Records of implementation.
 - a. Extent of practice units applied, acres.
- 2. Guidance for record keeping (implementation records maintained by the producer or agent)
 - a. Records of crops produced, planting and harvest dates, yields, residue management.
 - b. Records of recurring soil tests, and other tests (e.g. manure, plant tissue, water) used to implement the plan.
 - c. Records of recommended nutrient application rates.
 - d. Records of nutrient applications including quantities, analyses, and sources of nutrients applied; dates and methods of application.
 - e. Records of recurring review of the plan including the dates or review, individual performing the review, and recommendations that resulted from the review.
- 3. Certification that the application meets NRCS standards and specifications and is in compliance with permits.
- 4. Progress reporting.

REFERENCES

- NRCS Field Office Technical Guide (eFOTG), Section IV, Conservation Practice Standard Nutrient Management, 590
- NRCS General Manual Title 450, Part 401.03 (Technical Guides, Policy and Responsibilities) and Title 190, Part 402 (Ecological Sciences, Nutrient Management, Policy)
- NRCS National Planning Procedures Handbook (NPPH), CNMP Technical Guidance Document
- NRCS National Agronomy Manual (NAM) Section 503
- NRCS Agricultural Waste Management Field Handbook, Chapter 4 Agricultural Waste Characteristics
- NRCS National Environmental Compliance Handbook
- NRCS Cultural Resources Handbook

NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

PEST MANAGEMENT

(Acre) CODE 595A

DEFINITION

Managing agricultural pest infestations (including weeds, insects, and diseases) to reduce adverse effects on plant growth, crop production, and environmental resources.

PURPOSES

To develop a pest management program that is both consistent with selected crop production goals and environmentally acceptable.

CONDITIONS WHERE PRACTICE APPLIES

On cropland where pest control is needed.

On cropland within a ground water quality concern area or within a surface water quality concern area where pest control is needed.

CRITERIA

Ground Water Quality Concern Area

For each field or conservation treatment unit (CTU), determine which target pesticides are being used and their application schedules.

If one or more target pesticides are being used, find the Pesticide Leaching Potential rating for each of the target pesticides. Refer to the Pesticide Data Base in Section II of the Field Office Technical Guide (FOTG).

Find the Soil Leaching Potential rating for each soil mapping component in the field (or CTU). Refer to the Soil Ratings For Determining Water Pollution Risk For Pesticides list in Section II of the FOTG.

Determine the Potential Pesticide Loss to Leaching rating for each target pesticide being used. Refer to the Potential Pesticide Loss to Leaching Matrix in Section II of the FOTG.

Where the Potential Pesticide Loss to Ground Water is rated as 3, consider this practice not needed on this field (or CTU).

Surface Water Quality Concern Area

For each field or conservation treatment unit (CTU), determine which target pesticides are being used and their application schedules.

If one or more target pesticides are being used, find the Pesticide Surface Loss Potential rating for each of the target pesticides. Refer to the Pesticide Data Base in Section II of the Field Office Technical Guide (FOTG).

Find the Soil Surface Loss Potential rating for each soil mapping component in the field (or CTU). Refer to the Soil Ratings For Determining Water Pollution Risk For Pesticides lists in Section II of the FOTG.

Determine the Potential Pesticide Loss to Surface Runoff rating for each targeted pesticide being used. Refer to the Potential Pesticide Loss to Surface Runoff Matrix in Section II of the FOTG.

Where the Potential Pesticide Loss to Surface Runoff is rated as 3, consider this practice not needed on this field (or CTU).

Both Water Quality Concern Areas

Where the Potential Pesticide Loss to Ground Water or Surface Runoff is rated as 1 or 2, this practice is needed on this field (or CTU).

Specify the target pests, the cropping sequence, and the target pesticides being used.

Evaluate each target pesticide for its health hazard to humans and animals. If a pesticide is a potential danger to health, suggest that the land user/producer substitute an alternative pesticide, alternative pesticide application techniques, or other pest management techniques.



Identify alternatives with the land user/producer to reduce or eliminate target pesticides including such items as changing crop management techniques to include rotations.

Plan erosion control practices to minimize soil loss and runoff that can carry dissolved and adsorbed pesticides to surface waters. Proper irrigation water management will reduce deep percolation of pesticides. Proper tailwater management can reduce runoff containing pesticides.

Field applications of pesticides should be forgone just prior to predicted heavy rainfall or irrigation to prevent surface water contamination and ineffective control of target plants and animals.

Identify the use of integrated pest management (IPM) systems that utilize the most appropriate means of pest control including cultural, mechanical, chemical, and biological control such as insect attractant traps.

Consider crop rotation and varietal resistance as a part of the integrated pest management system. This will remove or reduce pesticide availability as a potential pollutant of water.

Encourage field scouting of pests to determine when the treatment threshold has been reached. Treatment thresholds for specific insects and crops are available from Cooperative Extension. Uneconomic and environmentally unneeded application of pesticides can thus be avoided.

CONSIDERATIONS

- Use integrated pest management principles, some major features of which are incorporated in subsequent items.
- Consider the use of crop rotations, crop varieties resistant to the target pest(s), and adjusting planting dates to help control weed, insect, and disease problems.
- Consider mechanical cultivation and biological controls, where appropriate, to control pests.
- Consider the effect of adequate plant nutrients and soil moisture, favorable pH, and good soil condition to reduce plant stress and improve plant vigor.
- 5. Consider use of hand weeding for small, isolated areas, or on larger areas where labor costs are not

- prohibitive. Spot spraying rather than full-coverage spraying is another alternative.
- 6. Consider pesticide characteristics such as solubility, toxicity, degradation products, mobility, persistence, adsorption, and efficacy, and relationships to site characteristics such as soil, geology, depth to water table, proximity to surface water, topography, climate, and sensitive environmental elements to determine the potential impact on water quality.
- 7. Practice timing of pesticide application in relation to present soil moisture, anticipated weather conditions, and irrigation to achieve greatest efficiency and reduce potential for offsite transport. The method of pesticide application, such as ground or aerial spraying, wicking, granules, etc., is important since the degree of drift and volatilization can vary considerably.
- Consider the effects of erosion control practices, including subsurface water management, used to reduce soil loss and runoff on transport of adsorbed and dissolved pesticides.
- Consider the effects of repetitive use of the same or similar pesticides on pest resistance and shifts in the pest types.
- Consider effects of pest control measures on nontarget soil organisms, and on aquatic and terrestrial life. Special care should be afforded to threatened and endangered species of plants and animals.
- Consider effects of the seasonal water budget on potential pesticide loss from the plant environment to surface or ground water.

Endangered Species Considerations

Determine if installation of this practice with any others proposed will have any effect on any federal or state listed Rare, Threatened or Endangered species or their habitat. NRCS's objective is to benefit these species and others of concern or at least not have any adverse effect on a listed species. If the Environmental Evaluation indicates the action may adversely affect a listed species or result in adverse modification of habitat of listed species which has been determined to be critical habitat, NRCS will advise the land user of the requirements of the Endangered Species Act and recommend alternative conservation treatments that avoid the adverse effects. Further assistance will be provided only if the landowner selects one of the alternative conservation treatments for installation; or



at the request of the landowners, NRCS may initiate consultation with the Fish and Wildlife Service, National Marine Fisheries Service and/or California Department of Fish and Game. If the Environmental Evaluation indicates the action will not affect a listed species or result in adverse modification of critical habitat, consultation generally will not apply and usually would not be initiated. Document any special considerations for endangered species in the Practice Requirements Worksheet.

Some species are year-round residents in some streams, such as, freshwater shrimp. Other species, such as steelhead and salmon, utilize streams during various seasons. Be aware that during critical periods, such as spawning, eggs in gravel's, and rearing of young may preclude activities in the stream that may directly affect the stream habitat during those periods. For example there should be no disturbance of stream gravel beds that may have eggs in them. That could include any equipment in the stream or even walking in the stream or work upstream that may result in sediment depositing in the gravel beds. Document any special considerations for endangered species in the Practice Requirements Worksheet.

Water Quantity

This practice is considered to have no effect on the amount of water except on irrigated land where it may result in reduced pesticide laden irrigation runoff due to less water being applied.

Water Quality

This practice limits the availability of pesticides in or on the soil and on plant foliage that could pollute surface or ground water by reducing pesticide application numbers and amounts to those necessary to protect the agricultural commodity, or where feasible, eliminating them entirely.

PLANS AND SPECIFICATIONS

- Identify the target pest(s), the life cycle periods when it is most vulnerable to control, and the best mechanical, biological, or chemical control method or combinations of control and list limitations on use.
- Develop and use a water budget when planning the
 use of this practice that will show the seasonal
 distribution of water resources under the
 appropriate soil-crop-management system.

- 3. Describe specifications for any pest management measure consistent with state and local regulations. Appropriate land grant university publications concerning pesticide use will be maintained and updated as part of the field office technical guide, and all recommendations for specific pesticides, rates of pesticides, level of crop tolerance, and effectiveness ratings for the target pest(s) shall be in accordance with these publications.
- 4. Determine potential pesticide loss to surface runoff and leaching using "Soil Ratings for Pesticide Leaching and Surface Loss Potentials" or other appropriate ratings for soils and pesticides in Section II of the field office technical guide. This information will be used to rank the various pesticides in terms of their potential to contaminate water resources and to consider other management options.
- 5. All specifications will be consistent with state and local regulations.

Specify that the land user/producer shall consult with a Farm Advisor and a Pest Control Advisor (PCA) licensed by the California Department of Food and Agriculture to explore use of non-target pesticides and use of integrated pest management.

Include wording that the person will perform all the necessary operations, safety and maintenance items needed.

OPERATION AND MAINTENANCE

- 1. Prepare a chemical management plan.
- Maintain mechanical equipment in good working condition and calibrate application equipment to ensure recommended rates are applied. Replace worn components of pesticide application equipment as well as other pest management implements.
- Operators of equipment must be alert at all times to avoid bodily injury and unnecessary exposure to chemicals.
- Pesticide users must read and follow label directions, maintain appropriate Material Safety Data Sheets (MSDS), and become certified to apply restricted use pesticides.

- Apply chemicals during periods of minimum potential for drift.
- Minimize exposure to chemicals, wear protective clothing, and use safety equipment as appropriate.
- Ensure that the pesticide applicator knows the exact field location to be treated. Post signs according to label directions or state and Federal laws around fields that have been treated. Follow the established re-entry time as stated on the MSDS.
- Properly locate chemical mixing and equipment rinsing stations relative to potential for contamination of ground or surface water. Extreme care must be taken to follow loading and mixing procedures. Provide for managing accidental spills.
- Properly rinse equipment and re-use rinsate for subsequent batches of the same pesticide, where possible.
- 10. Store pesticides in original containers in a locked, well ventilated weather resistant building. Post warning signs on or around the building. Locate the building so that accidental spills will create minimal environmental effects. Dispose of pesticide containers according to label directions and adhere to local or state regulations.
- 11. Provide emergency wash stations for personnel who might be accidentally exposed to chemicals, and formulate a safety plan complete with information about locations of emergency treatment centers for personnel exposed to chemicals.
- Ensure that backflow prevention devices are installed and operating property on irrigation systems used for applying pesticides.
- 13. Recognize the dangers from excessive exposure to the take appropriate precautionary measures. This is especially important for farm workers who spend long hours in the field.

The pesticide user should be encouraged to:

 Protect water wells with earth berms to prevent accidental pesticide spills from entering the underground water table.

- Always maintain a safe distance of several hundred feet from water wells when mixing and loading pesticides.
- Clean application equipment after each use by triple rinsing according to state and local regulations. Be sure rinse water is kept away from high runoff areas, wells, ponds, lakes, streams, and other water bodies.
- Always store pesticides in the original labeled containers, preferably in a locked building with appropriate warning signs.
- 5. Dispose of leftover material and containers according to label requirements. Never reuse pesticide containers for any purpose other than to return to manufacturer.

NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE SPECIFICATION

595A - PEST MANAGEMENT

I. SCOPE

The work shall consist of managing the use of Target Pesticides to control agricultural pest infestations on fields designated on the conservation plan map.

II. GENERAL

This specification applies to Target Pesticides listed in Section II of the local Field Office Technical Guide and identified on the Practice Requirements sheet.

Target Pesticides shall be used on the pests and crops listed on the Practice Requirements sheet.

III. MATERIALS

All pesticides used in performing this practice shall be Federally, State, and locally registered and shall be applied strictly in accordance with authorized and registered uses, directions on the label, and other Federal or State policies and requirements. Chemical containers shall be properly stored and disposed of in a safe manner.

IV. PESTICIDE USE IN GROUND WATER OUALITY CONCERN AREAS

This Section shall apply when specified on the Practice Requirements sheet.

The use of substitute nontarget pesticides and integrated pest management shall be discussed with a UC Cooperative Extension Farm Advisor and a Pest Control Advisor (PCA).

Field scouting of pests shall be used to determine when treatment threshold has been reached.

Crop rotation and use of resistant cultivars shall be used when economically viable.

Irrigated Fields treated with a Target Pesticides shall also comply with the Specification No. 449 - Irrigation Water Management.

Other treatments needed for reducing Target Pesticide impacts on ground water shall be performed when specified on the Practice Requirements sheet.

V. PESTICIDE USE IN SURFACE WATER QUALITY CONCERN AREAS

This Section shall apply when specified on the Practice Requirements sheet.

The use of substitute nontarget pesticides and integrated pest management shall be discussed with a UC Cooperative Extension Farm Advisor and a Pest Control Advisor.

Field scouting of pests shall be used to determine when treatment threshold has been reached.

Crop rotation and use of resistant cultivars shall be used when economically viable.

Pesticides shall not be applied just prior to predicted heavy rainfall or an irrigation.

Cultural operations, plant growth, and crop residues shall reduce the predicted rainfall sheet and rill erosion rate for the crop rotation or permanent crop to the soil loss tolerance identified for each field.

Irrigation tailwater shall be managed to minimized the amount of Target Pesticides leaving the farm.

Other treatments needed to reduce the impacts of Target pesticides on surface waters shall be performed when specified on the Practice Requirements sheet.

VI. OTHER REQUIREMENTS

The owner, operator, contractor, and other persons shall conduct all work and operations in accordance with proper safety codes for the type of equipment and operations being performed with due regard to the safety of all persons and their property.

Pesticide application equipment shall be calibrated to ensure applied rates are within 10 percent of the planned rates.

Pesticide materials shall be stored in original containers and protected from weather and accidental leakage or spillage.

NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

IRRIGATION WATER MANAGEMENT

(Acre) CODE 449

DEFINITION

Irrigation water management is the process of determining and controlling the volume, frequency, and application rate of irrigation water in a planned, efficient manner.

PURPOSE

Irrigation water management is applied as part of a conservation management system to support one or more of the following:

- Manage soil moisture to promote desired crop response
- Optimize use of available water supplies
- Minimize irrigation induced soil erosion
- Decrease non-point source pollution of surface and groundwater resources
- Manage salts in the crop root zone
- Manage air, soil, or plant micro-climate.

CONDITIONS WHERE PRACTICE APPLIES

This practice is applicable to all irrigated lands.

An irrigation system adapted for site conditions (soil, slope, crop grown, climate, water quantity and quality, etc.) must be available and capable of applying water to meet the intended purpose(s).

CRITERIA

General Criteria Applicable To All Purposes

All work shall comply with Federal, State, and local laws and regulations. Water shall not be applied in excess of the needs to meet the intended purpose.

Irrigator Skills and capabilities

The irrigator and/or decision-maker shall have the knowledge and capability to manage and apply irrigation water in such a manner that the purposes can be reasonably achieved.

Proper irrigation scheduling, in both timing and amount, control of runoff, and the uniform application of water are of primary concern. The knowledge and capabilities required for efficient water management shall include:

A. General

- How to determine when irrigation water should be applied, based on the rate of water used by crops and on the stages of plant growth and/or soil moisture monitoring.
- How to measure or estimate the amount of water required for each irrigation, including the leaching needs.
- How to recognize and control erosion caused by irrigation.
- How to estimate the uniformity of water application.
- The capability to measure the amount of water applied.
- How to perform system maintenance to assure efficient operation.
- How to determine "where the water goes" after entering the soil surface considering surface and subsurface wetting patterns and soil available water holding capacity.
- How to manage salinity and shallow water tables through water management.
- 9. The capability to control the irrigation delivery.

B. Surface Systems

 The relationship between advance rate, time of opportunity, intake rate, and other

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characteristics on distribution uniformity and the amount of water infiltrated.

- 2. How to estimate and control the amount of irrigation runoff.
- How to adjust stream size, or irrigation time to compensate for seasonal changes in intake rate and the amount of water to be applied.

C. Pressurized Systems

- 1. How to adjust the application rate and duration to apply the required amount of water.
- 2. How to recognize and remedy runoff problems.
- How to identify and improve uniformity of water application.

System Performance

The irrigation system must be capable of applying water uniformly and provide the irrigator with adequate control over water application. The uniformity shall be that which is economically achievable for a given irrigation method and area.

Additional Criteria to Manage Soil Moisture to Promote desired Crop Response

The following principles shall be applied for various crop growth stages:

- The volume of water needed for each irrigation shall be based on plant available water holding capacity of the soil for the crop rooting depth, management allowed soil water depletion, irrigation efficiency, and water table contribution.
- The irrigation frequency shall be based on the volume of irrigation water needed and/or available, the rate of crop evapotranspiration, and effective precipitation.
- The application rate shall be based on the volume of water to be applied, the frequency of irrigation applications, soil infiltration and permeability characteristics, and the capacity of the irrigation system.

Additional Criteria To Optimize Use Of Water Supplies

Limited irrigation water supplies shall be managed to meet critical crop growth stages.

Additional Criteria to Minimize Irrigation Induced Soil Erosion

Application rates shall be consistent with local field conditions for long term productivity of the soil.

Additional Criteria to Decrease Non-Point Source Pollution of Surface and Groundwater Resources

Water application shall be at rates that minimize transport of sediment, nutrients, and chemicals to surface waters and that minimize transport of nutrients and chemicals to groundwater.

Additional Criteria to Manage Salts in the Crop Root Zone

The irrigation application volume shall be increased by the amount required to maintain an appropriate salt balance in the soil profile.

The requirement shall be based on the leaching procedure contained in the National Engineering Handbook (NEH) Part 623, Chapter 2.

Additional Criteria to Manage Air, Soil, or Plant Micro-Climate

The irrigation system shall have the capacity to apply the required rate of water for cold or heat protection as determined by the methodology contained in NEH Part 623, Chapter 2.

CONSIDERATIONS

The following items should be considered when planning irrigation water management:

- Consideration should be given to managing precipitation effectiveness, crop residues, and reducing system losses.
- Modify plant populations, crop and variety selection, and irrigated acres to match available or anticipated water supplies.
- Consider potential for spray drift and odors when applying agricultural and municipal wastewater.

- Equipment modifications and/or soil amendments such as polyacrylamides and mulches should be considered to decrease erosion.
- Consider the quality of water and the potential impact to crop quality and plant development.
- Quality of irrigation water should be considered relative to its potential effect on the soil's physical and chemical properties, such as soil crusting, pH, permeability, salinity, and structure.
- Avoid traffic on wet soils to minimize soil compaction.
- Consider the effects that irrigation water has on wetlands, water related wildlife habitats, riparian areas, cultural resources, and recreation opportunities.
- Management of nutrients and pesticides.
- Schedule salt leaching events to coincide with low residual soil nutrients and pesticides.
- Water should be managed in such a manner as to not drift or come in direct contact with surrounding electrical lines, supplies, devices, controls, or components that would cause shorts in the same or the creation of an electrical safety hazard to humans or animals.
- Consideration should be given to electrical load control/interruptible power schedules, repair and maintenance downtime, and harvest downtime.
- Consider improving the irrigation system to increase distribution uniformity of irrigation water application.

ENDANGERED SPECIES CONSIDERATIONS

Determine if installation of this practice with any others proposed will have any effect on any federal or state listed Rare, Threatened or Endangered species or their habitat. NRCS's objective is to benefit these species and others of concern or at least not have any adverse effect on a listed species. If the Environmental Evaluation indicates the action may adversely affect a listed species or result in adverse modification of habitat of listed species which has been determined to be critical habitat, NRCS will advise the land user of the requirements of the Endangered Species Act and recommend alternative conservation treatments that avoid the adverse effects. Further assistance will be provided only if the landowner selects one of the alternative conservation treatments for installation; or at the request of the landowners, NRCS may initiate consultation with the Fish and Wildlife Service. National Marine Fisheries Service and/or California Department of Fish and Game. If the Environmental Evaluation indicates the action will not affect a listed species or result in adverse modification of critical habitat, consultation generally will not apply and usually would not be initiated. Document any special considerations for endangered species in the Practice Requirements Worksheet.

PLANS AND SPECIFICATIONS

Application of this standard may include job sheets or similar documents that specify the applicable requirements, system operations, and components necessary for applying and maintaining the practice to achieve its intended purpose(s).

OPERATION AND MAINTENANCE

There are no operation and maintenance (O&M) aspects applicable to this standard. Necessary O&M items are addressed in the physical component standards considered companions to this standard.

NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE SPECIFICATION

449 - IRRIGATION WATER MANAGEMENT

I. SCOPE

This practice shall consist of improving the application of irrigation water to the fields as shown on the plan(s) or drawing(s), and/or as stake in the field.

II. IRRIGATOR SKILLS AND CAPABILTIES

The irrigator and/or decision maker shall have the knowledge and capability to manage and apply irrigation water in such a manner to achieve the objectives.

Proper irrigation scheduling, in both timing and amount, control or runoff, and the uniform application of water are of primary concern. The knowledge and capabilities required for efficient water management should include:

A. General

- How to determine when irrigation water should be applied, based on the rate of water used by crops and on the stages of plant growth and/or soil moisture monitoring.
- How to measure or estimate the amount of water required for each irrigation, including the leaching needs.
- How to recognize and control erosion caused by irrigation.
- 4. How to estimate the uniformity of water application.
- 5. The capability to measure the amount of water applied.
- How to perform system maintenance to assure efficient operation.
- How to determine "where the water goes" after entering the soil surface considering surface and subsurface wetting patterns and soil available water holding capacity.

- How to manage salinity and shallow water tables through water management.
- 9. The capability to control the irrigation delivery.

B. Surface Systems

- The relationship between advance rate, time of opportunity, intake rate, and other characteristics on distribution uniformity and the amount of water infiltrated.
- How to estimate and control the amount of irrigation runoff.
- How to adjust stream size, or irrigation time to compensate for seasonal changes in intake rate and the amount of water to be applied.

C. Pressurized Systems

- How to adjust the application rate and duration to apply the required amount of water.
- 2. How to recognize runoff problems.

III. SYSTEM PERFORMANCE

The irrigation system must be capable of applying water uniformly and provide the irrigator with adequate control over water application. The uniformity shall be that which is economically achievable for a given irrigation method and area.

IV. IMPLEMENTATION

The implementation of this practice should be by incremental application of recommended changes in the system. The cooperator may not acquire all of the skills required from a few technical assistance visits. Management changes in the system operation usually require a long-term relationship during which new methods can be explained and tried.

Follow up visits should be made to provide any further assistance and to verify the implementation of improvements. The goal is to have an acceptable





irrigation system in place and an irrigator which applies efficient water management skills routinely.

V. BASIS OF ACCEPTANCE

The practice shall be considered acceptable after onsite inspection has been made and a determination that the principles of the Practice have been adhered to.

VI. OPERATION AND MAINTENANCE

The owner/user should be aware of the items listed in the Operation and Maintenance plan that has been prepared and provided to him for his guidance in managing the operations for this practice.

STATEMENT OF WORK Irrigation Water Management (449)

These deliverables apply to this individual practice. For other planned practice deliverables refer to those specific Statements of Work.

DESIGN

Deliverables:

- Design documents that demonstrate criteria in NRCS practice standard have been met and are compatible with planned and applied practices.
 - a. Practice purpose(s) as identified in the conservation plan
 - b. List of required permits to be obtained by the client
 - c. List of facilitating practices
 - d. Practice standard criteria-related computations and analyses to develop plans and specifications including but not limited to:
 - i. Volume of water (per irrigation & per season)
 - ii. Frequency of irrigation
 - iii. Application rate
 - iv. Environmental considerations
- 2. Written plans and specifications including sketches and drawings shall be provided to the client that adequately describes the requirements to install the practice and obtain necessary permits.
- 3. Operation and maintenance plan.
- 4. Certification that the design meets practice standard criteria and comply with applicable laws and regulations.
- 5. Design modifications during installation as required.

INSTALLATION

Deliverables

- 1. Pre-installation conference with client.
- 2. Verification that client has obtained required permits.
- 3. Staking and layout of measures according to plans and specifications including applicable layout notes.
- Installation guidance as needed.
- 5. Facilitate and implement required design modifications with client and original designer.
- Advise client/NRCS on compliance issues with all federal, state, tribal, and local laws, regulations and NRCS policies during installation.
- 7. Certification that the installation process and materials meet design and permit requirements.

CHECK OUT

Deliverables

- 1. Records of installation.
 - a. Extent of practice units applied
 - b. Actual amount of water applied during the growing season
- Certification that the application meets NRCS standards and specifications and is in compliance with permits.
- 3. Progress reporting.

REFERENCES

- NRCS Field Office Technical Guide, Irrigation Water Management, 449
- NRCS National Engineering Handbook, part 652, National Irrigation Guide
- NRCS National Engineering Manual
- NRCS National Environmental Compliance Handbook
- NRCS Cultural Resources Handbook

NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

MULCHING (Acre) CODE 484

DEFINITION

Applying plant residues or other suitable materials to the soil surface.

PURPOSES

To conserve moisture; prevent surface compaction or crusting; reduce runoff and erosion; modify surface temperatures, control weeds; help establish plant cover and reduction of particulate matter emissions into the air.

CONDITIONS WHERE PRACTICE APPLIES

On soils subject to erosion; on areas where traffic may cause compaction, erosion, or airborne emissions, where conserving soil moisture is desirable and on soils that have a low infiltration rate.

CRITERIA

Erosion Control on Critical Areas

When mulching with straw, use at least 4,000 pounds of cereal grain straw or grass hay per acre evenly distributed over the area to be treated and anchored sufficiently to hold it on the site.

When mulching with wood fiber, use at least 2,000 pounds of wood fiber mulch per acre.

Other Applications

When mulching with straw, use at least 2,000 pounds of cereal grain straw or grass hay per acre evenly distributed over the area to be treated and anchored sufficiently to hold it on the site

When mulching with other wood products (chips, bark, shavings) or other material, they must be applied in an amount that will provide at least 80 percent ground cover.

When mulching with gravel or other inorganic material for permanent erosion control, they must be applied in sufficient amounts to provide 90 percent ground cover.

All straw mulch materials will be acceptable to the County Agricultural Commissioner, per California Food and Agriculture Code Section 5101 and 5205.

Protection or Soil Improvement

The mulch material used will be evenly applied in sufficient amounts to achieve the results contemplated when used alone or in combination with other practices.

When waste materials with potential for polluting surface waters are used for mulching (animal manures, sewage sludge, wastes from food processing, other similar materials) care will be taken to assure that runoff from the area will not enter streams, lakes, ponds, or reservoirs and that nitrate leaching will not be a problem. Measures will also be taken to prevent mulch from washing away due to concentrated flows, rainfall, or irrigation.

CONSIDERATIONS

Common mulch materials available include barley oats, rice, and wheat straw. Rice straw tends to persist longer. Most hay will decompose faster than barley or wheat.

Many hillside producers often "winterize" their steep farm roads with straw at the beginning of the rainy season and then restrict vehicle traffic.

Disturbed construction sites (incl. building pads, mass grading, house pads, rough grading projects) often use mulches to comply with their conditional use permit to comply with their storm water pollution prevention plan, grading ordinance, erosion control plan or conditional use permit.

Barley and wheat straw usually contains 10 to 15 pounds/acre of seed. The resulting green growth does

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.

NRCS, CA October 2002 not interfere with most intended uses or future landscaping.

Use of wheat straw usually results in less volunteer grain when compared to barley straw.

Rollers and crimpers can be pulled on slopes up to 3:1. Where there is access, equipment can be winched up and down steeper slopes. Tackifiers can be utilized to anchor when equipment cannot be used on the site.

Use 75 feet as the effective range for straw blowing equipment.

Use 125 feet as the effective range for hydroseeders. With the use of a 100-foot hose the range can be extended up to 200 feet.

Many organic waste materials are suitable for use as mulches. These materials include wood bark, chips, shavings, and sawdust: animal manures; rice hulls; and some food processing plant wastes.

Demand for mulching as a method of protecting steep areas disturbed by construction (road sides, ditch banks, building sites, dams, etc.) has led to development of equipment for applying mulches and a number of products to hold mulching materials in place.

Mulching application equipment includes blowers, hydro applicators.

Manufactured mulches include wood-fiber and paper mulch.

Anchoring

Anchoring of mulches can be accomplished by using the following methods:

Netting, tackifiers, matting: hand, roller, or crimper punching and disk-type straw punchers.

Netting to anchor mulches is made from plastics, paper, jute, and burlap. They are anchored with staples of various materials.

Several liquid "tackifiers" that can be mixed with water and sprayed on fiber mulches to bind them together are available. These "tackifiers" will be compatible with the mulch applied and in sufficient amount to adequately bind the materials together for the intended life of the practice.

NRCS, CA October 2002

Water Quantity

Mulching is the application of some material around plants and crops, and on areas which have been disturbed and require temporary protection. Mulching is used to control weeds, surface temperatures, erosion, and to retain moisture.

Mulching may improve microbial action in the soil surface, may improve infiltration, and may reduce runoff, erosion, and evaporation. Increased infiltration may result in soluble chemicals moving below the root zone.

There is a potential for changes in plant growth and transpiration because of changes in the soil water volume.

Cultural Resources Considerations

Determine if installation of this practice with any others proposed will have any effect on any cultural resources. NRCS's objective is to avoid any effect to cultural resources and protect them in their original location. GM 420, Part 401, the California Environmental Handbook and the training for the California Environmental Assessment Worksheet specify how the NRCS must account for cultural resources. The Field Office Technical Guide, Section II contains general information, with Web sites for additional information, about cultural resources. The Environmental Handbook is online at www.ca.nrcs.usda.gov/rts/rts.html.

Endangered Species Considerations

Determine if installation of this practice with any others proposed will have any effect on any federal or state listed Rare, Threatened or Endangered species or their habitat. NRCS's objective is to benefit these species and others of concern or at least not have any adverse effect on a listed species.

If the Environmental Evaluation indicates the action may adversely affect a listed species or result in adverse modification of habitat of listed species which has been determined to be critical habitat, NRCS will advise the land user of the requirements of the Endangered Species Act and recommend alternative conservation treatments that avoid the adverse effects. Further assistance will be provided only if the landowner selects one of the alternative conservation treatments for installation; or at the request of the

landowners, NRCS may initiate consultation with the Fish and Wildlife Service, National Marine Fisheries Service and/or California Department of Fish and Game. If the Environmental Evaluation indicates the action will not affect a listed species or result in adverse modification of critical habitat, consultation generally will not apply and usually would not be initiated. Document any special considerations for endangered species in the Practice Requirements Worksheet.

Some species are year-round residents in some streams, such as, freshwater shrimp. Other species, such as steelhead and salmon, utilize streams during various seasons. Be aware that critical periods, such as spawning, eggs in gravels, and rearing of young may preclude activities in the stream that may directly affect the stream habitat during those periods. For example there should be no disturbance of stream gravel beds that may have eggs in them. That could include any equipment in the stream or even walking in the stream or work upstream that may result in sediment depositing in the gravel beds. Document any special considerations for endangered species in the Practice Requirements Worksheet.

Water Quantity

Mulching is the surface application of plant residues or other suitable materials on the soil surface. It includes the application on areas which have been disturbed and require temporary protection. Mulching is used to control weeds, help establish plant cover, control surface temperatures, reduce erosion, reduce particulate matter and to retain moisture.

Mulching may improve microbial action on the soil surface, may reduce runoff, erosion and evaporation. Increased infiltration may result in soluble chemicals moving below the root zone.

There is a potential for changes in plant growth and transpiration because of changes in the soil water volume.

Water Quality

This practice may reduce the delivery of sediment and related chemicals to surface water by reducing runoff and erosion. The temperature of the surface runoff may be lowered.

PLANS AND SPECIFICATIONS

Plans and Specifications shall be in keeping with this standard and shall describe the requirements for applying the practice to achieve its intended purpose.

Include the amount and type of mulch needed on the Practice Requirement Sheet along with all details needed for proper application.

OPERATION AND MAINTENANCE

The owner or operator will be responsible for operating all equipment safety and maintaining this practice.

Mulch will be replaced as needed to maintain the amount of mulch during the required period.

The area mulched will be inspected after significant events to ensure the mulch is adequate for the intended purpose.

REFERENCES

NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE SPECIFICATION

484 - MULCHING

I. SCOPE

The work shall consist of furnishing all materials and placing them on all exposed, disturbed, or barren areas within the field or project area to the limits as shown on the drawings, or as staked in the field.

II. MATERIALS

Straw

Straw shall be new straw derived from rice, wheat, oats, or barley. Clearance shall be obtained from the County Agricultural Commissioner, as required by law, before straw obtained outside the county in which it is to be used is delivered to the site.

Wood Fiber

Wood fiber shall be a wood cellulose fiber that contains no germination or growth inhibiting factors. The wood fiber has the property to be evenly dispersed and suspended when agitated in water. The wood fiber mulch may also be produced from the following materials:

- Recycled wood fiber, such as wood chips or similar wood materials
- B. A combination of recycled newsprint and cardboard materials that contain at least 50 percent cardboard or,
- C. A combination of recycled newsprint and nonrecycled wood fiber or recycled wood fiber materials that does not contain more than 50 percent newsprint

Tackifier

Tackifier material shall be of the material specified on the Practice Requirements Sheet and shall have the property to be evenly dispersed and suspended in water when agitated. It shall be colored with a nontoxic water-soluble green dye to provide a proper gauge for metering of material over ground surfaces.

Jute Matting

Jute matting shall be of cloth of uniform plain weave of undyed and unbleached jute yarn with a minimum weight of 1 pound per 10 square feet, and shall have ¾ inch square openings.

Excelsior Matting

Excelsior matting shall consist of a mat of wood excelsior fiber with a consistent thickness and the fiber evenly distributed over the entire area of the blanket. At least 70% of the fibers shall be 6 inches or longer in length. The topside of the blanket shall be covered with a biodegradable, extruded plastic mesh with a maximum opening size of 2 by 2 inches.

Plastic Netting

Plastic netting shall be polypropylene extruded plastic netting with square or rectangular openings not greater than 1 inch and a weight of not less than 2.6 pounds per 1000 square feet.

Staples, Pins, and Stakes

Staples, pins, and stakes shall be of metal, wood, plastic, or other acceptable material and of a length as specified on the Practice Requirements Sheet.

Other Materials

Other materials shall be used when specified on the Practice Requirements Sheet.

III. MULCHING DATES

Mulching shall be performed prior as specified on the Practice Requirements Sheet.

IV. SITE PREPARATION

The area to be mulched shall be weed free and have a uniform surface. No implement shall be used that will

NRCS, CA October 2002



create an excessive amount of downward movement of clods on sloping areas.

Trash, weeds, and other debris that will interfere with mulching or maintenance shall be removed.

Site preparation shall be suspended when soil moisture conditions are not suitable for obtaining a satisfactory surface.

V. APPLYING THE MULCH

Use one of the following methods of application as specified on the Practice Requirements Sheet.

Mulching with Wood Fiber

A wood fiber covering shall be distributed uniformly over the area in a water slurry by hydroseeder.

The slurry shall contain wood fiber at the rate of 2,000 pounds per acre with a tackifier unless a different amount is specified on the Practice Requirements Sheet.

Application rates for wood fiber mulch products that have moisture contents greater than 15 percent shall be increased by the following factor, c:

The application rate of the tackifier shall be:

Tackifier	Rate	Wood Fiber Mulch
M-Binder	100lbs	1,500 to 2,000lbs
Sentinel	100lbs	1,500 to 2,000lbs
Ecotak-SAT	100lbs	1,500 to 2,000lbs
Fish-STIK	100lbs	1,500 to 2,000lbs
Soil Master WR	100gal	2,000 to 2,500lbs

The hydroseeder shall be equipped with a built-in continuous agitation system of sufficient operating capacity to produce a homogenous slurry and a discharge system which will apply the slurry to the slopes at a continuous and uniform rate.

The materials shall not remain in the slurry longer than two (2) hours. Water used shall be potable water or Class 1 or 2 agricultural irrigation water.

The slurry shall be continuously mixed and shall be mixed for at least five (5) minutes after the last addition before application starts.

The slurry shall be applied uniformly over the site.

Mulching with Straw

A straw covering shall be distributed uniformly over the area at the rate of 2 tons per acre unless a different amount is specified on the Practice Requirements Sheet. The straw shall be applied by hand, blower, or other suitable equipment. If straw is applied by blower, it shall not be chopped in lengths less than 6 inches.

Anchoring the Straw Mulch

When specified on the Practice Requirements Sheet, the straw mulch shall be anchored in place. The anchoring process may include hand tools, mulching rollers, disks, or similar types of suitable equipment alone or in combination with a hydro-mulch material and shall be performed in a satisfactory manner. When specified on the Practice Requirements Sheet, hydromulch material alone may be used.

Anchoring may be accomplished using the following:

Hand Punching: A spade or shovel shall be used to punch the straw into the slope until 95 percent of the area has straw standing perpendicular to the slope and embedded at least 3 inches into the soil. It shall be punched from 12 to 18 inches apart.

Roller punching: A roller equipped with straight studs not less than 6 inches long, from 4 to 6 inches wide and approximately 1 inch thick shall be rolled over the slope.

Crimper Punching: A crimper with serrated disk blades about 4 to 8 inches apart shall be rolled over the slope forcing the straw mulch into the soil. Crimping should be done in two directions with the final pass across the slope.

The following shall be used on large steep areas which cannot be punched by hand or by roller:

Matting. Jute, excelsior or other matting specified on the Practice requirements Sheet shall be utilized.

Matting shall be applied up and down slope and continue beyond the edge of the mulched area at least I foot.

Matting shall be cut around objects so that it lies flat on the soil surface. At the top of the area the matting shall be buried in a trench at least 6 inches deep.

Overlap: Sides of the rolls shall overlap at least 4 inches. Overlapping ends will have at least 6 inches of overlap with the uphill roll overlying the downhill roll.

Staple: Staples shall be driven perpendicularly into the slope and spaced approximately 5 feet apart on the sides of the rolls and approximately 1-foot apart where the ends of the rolls overlap.

Plastic Netting

Plastic netting shall be applied up and down slope and shall continue beyond the edge of the mulched area at least one foot at the sides, top, and bottom of the area.

At the top of the area, the netting shall be buried in a trench at least 6 inches deep.

Overlap: Sides of the rolls shall overlap at least 4 inches. Overlap the upper strip 3 feet over the lower strip and secure with stakes every 2 feet.

Staples, pins, or stakes shall be driven perpendicularly into the slope.

Secure the upper end with stakes every 2 feet. The sides of the rolls shall be secured with stakes spaced approximately 5 feet apart. Additionally, the center of each roll shall be secured down the center approximately every 5 feet.

Where the ends of the rolls overlap, secure with stakes approximately 2 feet apart.

Tackifier

The hydro-mulch material shall be applied uniformly over the straw in water slurry by hydroseeder within 48 hours following mulching. Unless otherwise specified on the Practice Requirements Sheet, the hydro-mulch shall be wood fiber mulch, a tackifier, and water in the following portions per acre:

Tackifier	Rate	Wood Fiber Mulch	Water
M-Binder	100 lbs	150 lbs	700 gal
Ecotak-SAT	100 lbs	150 lbs	700 gal
Sentinel	100 lbs	500 lbs	2,000 gal
Fish-STLK	60 lbs	500 lbs	3,000 gal
Soil Master WR	100 gal	250 lbs	1,000 gal

Application rates for wood fiber mulch products that have moisture contents greater than 15 percent shall be increased by the following factor, c:

The hydroseeder shall be equipped with a built-in continuous agitation system of sufficient operating capacity to produce homogenous slurry and a discharge system, which will apply the slurry to the slopes at a continuous and uniform rate.

The materials shall not remain in the slurry longer than two (2) hours. Water used shall be potable water or Class 1 or 2 agricultural irrigation water.

The sturry shall be continuously mixed and shall be mixed for at least five (5) minutes after the last addition before application starts.

The slurry shall be applied uniformly over the site.

Mulching with Gravel

A gravel covering, with the size of the gravel specified on the Practice Requirements Sheet shall be distributed uniformly over the area at the rate specified on the Practice Requirements sheet to provide at least 95 percent ground cover. A fabric may be placed under the gravel.

Mulching with Other Materials

The material(s) specified on the Practice Requirements Sheet shall be distributed uniformly over the area at the rate specified on the Practice Requirements Sheet to provide at least 80 percent ground cover unless otherwise specified on the Practice Requirements Sheet.

Other Materials - Mats

Mats: Mats shall be applied as specified on the Practice Requirements Sheet. They will be anchored in a manner that will keep them in place.

VI. OTHER REQUIREMENTS

Operations shall be done in such a manner that soil erosion and air and water pollution are minimized and held within legal limits.

The owner, operator, contractor, and other persons shall conduct all work and operations in accordance

with proper safety codes for the type of equipment and operations being performed with due regards to the safety of all persons and property.

Natural Resources Conservation Service

STATEMENT OF WORK Mulching (484)

These deliverables apply to this individual practice. For other planned practice deliverables refer to those specific Statements of Work.

DESIGN

Deliverables:

- 1. Design documents that demonstrate criteria in NRCS practice standard have been met and are compatible with planned and applied practices.
 - a. Practice purpose(s) as identified in the conservation plan
 - b. List of required permits to be obtained by the client
 - c. Compliance with NRCS national and state utility safety policy (NEM Part 503-Safety, Subpart A Engineering Activities Affecting Utilities 503.00 through 503.06)
 - d. Practice standard criteria-related computations and analyses to develop plans and specifications including but not limited to:
 - i. Type of material, thickness/depth, durability
 - ii. Preparatory surface treatment including vegetation measures
 - iii. Application technique by material type
 - iv. Additional requirements to conserve soil moisture, moderate soil temperature, control erosion, suppress weeds, establish vegetative cover, improve soil condition and increase soil fertility
- 2. Written plans and specifications including sketches and drawings shall be provided to the client that adequately describes the requirements to install the practice and obtain necessary permits. Plans and specifications shall be developed in accordance with the requirements of conservation practice standard Mulching (Code 484).
- 3. Documentation of needed operation and maintenance.
- 4. Certification that the design meets practice standard criteria and comply with applicable laws and regulations.
- 5. Design modifications during installation as required.

INSTALLATION

Deliverables

- 1. Pre-application conference with client.
- Verification that client has obtained required permits.
- 3. Staking and layout according to plans and specifications including applicable layout notes.
- Application guidance as needed.
- 5. Facilitate and implement required design modifications with client and original designer.
- 6. Advise client/NRCS on compliance issues with all federal, state, tribal, and local laws, regulations and NRCS policies during installation.
- 7. Certification that the application process and materials meet design and permit requirements.

CHECK OUT

Deliverables

- 1. Records of application.
 - a. Extent of practice units applied
 - b. Actual kinds of surface treatments used and applied
- 2. Certification that the application meets NRCS standards and specifications and is in compliance with permits.
- 3. Progress reporting.

REFERENCES

- NRCS Field Office Technical Guide (eFOTG), Section IV, Conservation Practice Standard Mulching, 484
- National Agronomy Manual
- NRCS National Environmental Compliance Handbook
- NRCS Cultural Resources Handbook

Storm Water Pollution Control Plan

Storm Water Pollution Control Plan

GP

Section 1

COUNTY OF VENTURA

PUBLIC WORKS AGENCY

DEVELOPMENT SERVICES 1364.0

General Notes

- 1. Best Management Practices (BMP's) contained herein reflect minimum requirements. For ædditional BMP's refer to California Stormwater BMP Handbooks.
- All construction activity shall be performed in accordance with a Stormwood Pollution Control Plan (SWPCP) developed and implemented in compliance requirements of the Ventura Countywide Stormwater Quality Management Program, National Pollution Discharge Elimination System (NPDES) Permit CAS063339.
- 3. The SWPCP shall:
 - a. Identify potential pollutant sources and include the design and placeme of BMP's to effectively prohibit the entry of pollutants from the construction site into and onto the street and storm drain system duri construction.
 - Be kept on site and amended to reflect changing conditions throughout he coarse of construction.
 - Be kept up to date. Any odditional updates requested by agency representative are to be made immediately.
- 4. Non-Stormwater discharges are prohibited from entering any storm drain system and/or street.
- 5. Discharges of pumped ground water require a discharge permit from the of California Regional Water Quality Control Board (RWQCB).
- 6. Pollutants shall be removed from stormwater discharges to the Maximum Practicable (MEP) Unrough design & implementation of the SWPCP.
- 7. A standby crew for emergency work shall be available at all time during rainy season (Nov. 1 to Apr. 15). Necessary materials shall be available and stockpiled at convenient locations to facilitate rapid construction of emergency devices when rain is imminent.
- 8. Portable sanitary facilities shall be located on relatively level ground away traffic areas, drainage courses, and storm drain inlets.
- 9. Employees, subcontractors and suppliers shall be educated on all BMP's including concrete waste storage and disposal procedures.
- Sediment control practices shall effectively prevent a net increase of sediload in stormwater discharge.

General Notes

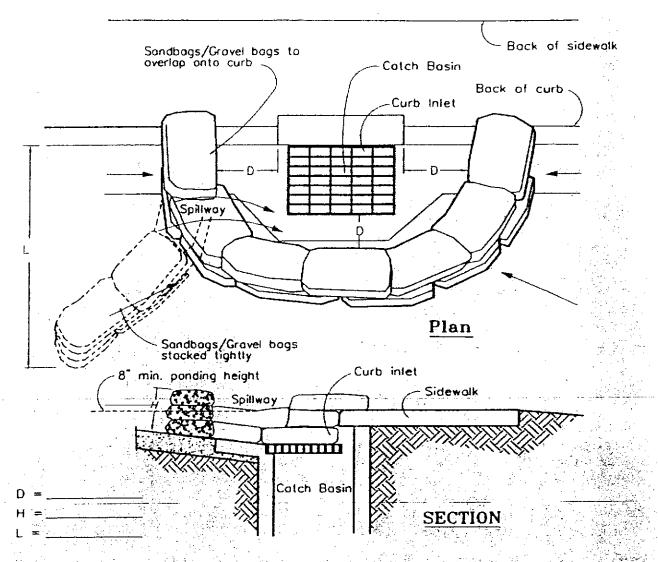
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- 2. All construction oct ivity shall be performed in accordance with a Stormwater Pollution Control Plan (SWPCP) developed and implemented in compliance with requirements of the Ventura Countywide Stormwater Quality Monagement Program, National Pollution Discharge Elimination System (NPDES) Permit No. CAS063339.
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 - c.

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- 7. A standby crew for emergency work shall be available at all time during the rainy season (Nov. 1 to Apr. 15). Necessary materials shall be available on site and stockpiled at convenient locations to facilitate rapid construction of emergency devices when rain is imminent.
- 8. Portable sanitary facilities shall be located on relatively level ground away from traffic areas, drainage courses, and storm drain inlets.
- 9. Employees, subcontractors and suppliers shall be educated on all BMP's including concrete waste storage and disposal procedures.
- 10. Sediment control practices shall effectively prevent a net increase of sediment load in stormwater discharge.

A

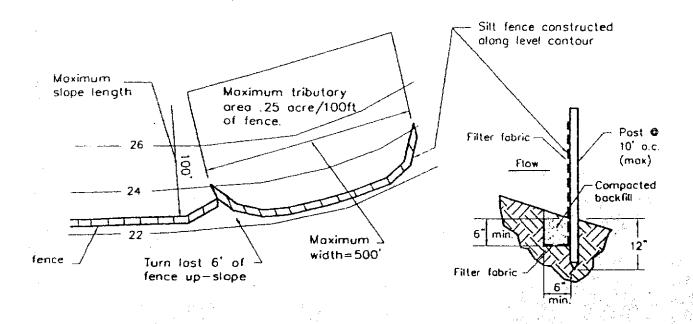
Catch Basin/Inlet Protection



Notes:

- 1. Catch Basin/Inlet protection shall be installed wherever there is a potential of stormwater or non-stormwater being discharged into it.
- 2. Inlet protection is required along with other pollution prevention measures such as; erosion control, soil stabilization, and measures to prevent tracking onto paved surfaces.
- 3. Modify inlet protection as needed to avoid creating traffic hazards.
- 4. Include inlet protection measures at hillside v-ditches and misc. drainage swales.
- 5. Intel protection shall be inspected and accumulated sediments removed. Sediment shall be disposed of properly and in a manner that assures that the sediment does not enter the storm drain system
- 6. Damaged bags shall be replaced immediately.
- 7. Additional sandbag sediment traps shall be placed at intervals as indicated on site plan.

Silt Fence

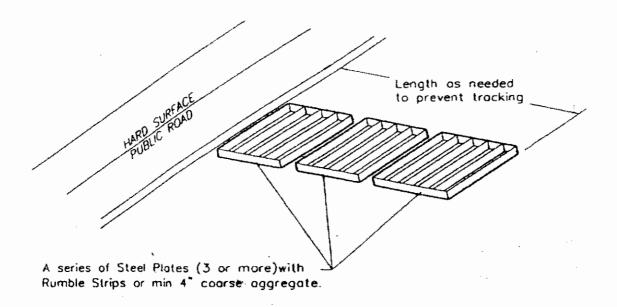


Notes:

- 1. Construct the silt fence along a level contour.
- 2. Silt fences shall remain in place until the disturbed area is permanently stabilized.
- 3. Provide sufficient room for runoff to pond behind the fence and allow sediment removal equipment to pass between the sill fence and toe of slope or other obstructions. About 1200 sq. ft. of ponding area shall be provided for every acre draining to the fence.
- 4. Turn the ends of the filter fence uphill to prevent stormwater from flowing around the fence.
- 5. Leave an undisturbed or stabilized area immediately downslope from the fence.

securely to the upslope side of the posts using heavy-duty wire stoples at least 1 inch long, lie wires or hog rings.

Stabilized Construction Entrance



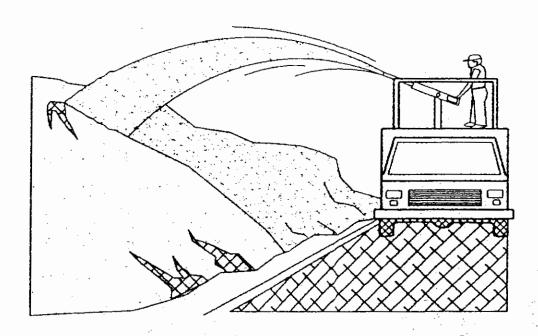
Notes:

- 1. Sediments and other materials shall not be tracked from the site by vehicle traffic. The construction entrance roadways shall be stabilized so as to prevent sediments from being deposited into the public roads. Depositions must be swept up immediately and may not be washed down by rain or other means into the storm drain system.
- 2. Stabilized construction entrance shall be:
 - a Located at any point where traffic will be entering or leaving a construction site to or from a public right of way, street, alley, and sidewalk or parking area.
 - b. A series of steel plates with "rumble strips", and/or min 4" coarse aggregate with length, width & thickness as needed to adequatly prevent any tracking onto paved surfaces.
- 3. Adding a wash rack with a sediment trap large enough to collect all wash water can greatly improve efficiency.
- 4. All vehicles accessing the construction site shall utilize the stabilized construction entrance sites.

Street Maintenance

- 1. Remove all sediment deposited on poved roadways immediately.
- Sweep paved areas that receive construction traffic whenever sediment becomes visible.
- Pavement washing with water is prohibited if it results in a discharge to the storm drain system.

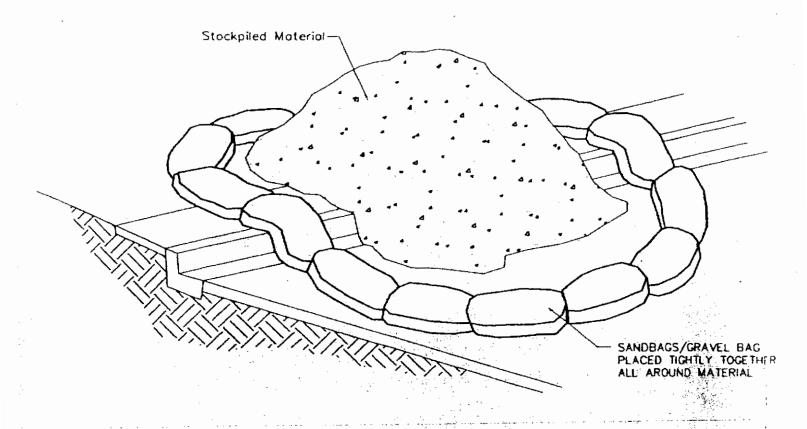
DErosion Control



Notes:

- Soil/Slope stabilization practices shall be designed to preserve existing vegetation where feasible and to revegetate open areas as soon as feasible after grading These control practices shall include temporary seeding, permanent seeding, mulching, sod stabilization, vegetative buffer strips, protection of trees, or other soil stabilization practices.
- 2. Soil stabilization shall be implemented on all inactive disturbed areas from November 1 thru April 15 and on all disturbed areas during a rain event or potential rain.
- 3. Stabilization practices shall control/prevent erosion from the forces of wind and water.
- 4. Stabilization practices shall be implemented in conjunction with sediment trapping/filtering practices and practices to reduce the tracking of sediment onto paved roads.
- 5. When using strow mulching, the minimum application shall be 2 tons/acre. Mulch must be anchored immediately to minimize loss by wind or water.
- 6. When using hydroseeding/mulching, the minimum application of wood fiber shall be 1,500 lbs/acre, lfrat does not contain more than 50 percent newsprint
- 7. For seeding recommendations, contact: USDA, Natural Resources Conservation Service or Ventura County RCD.

E <u>Material Storage</u>



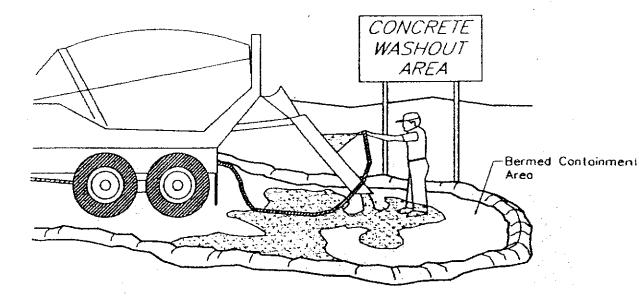
Notes

- 1. Dirt and other construction related materials placed in the street or on other impervious surfaces must be contained with sandbags or other measures to prevent transport to the stormdrain system.
- prevent transport to the stormdrain system.

 2. Any construction material stored or stockpiled on-site shall be protected from being transported by the force of wind or water.

F

Concrete Waste Management

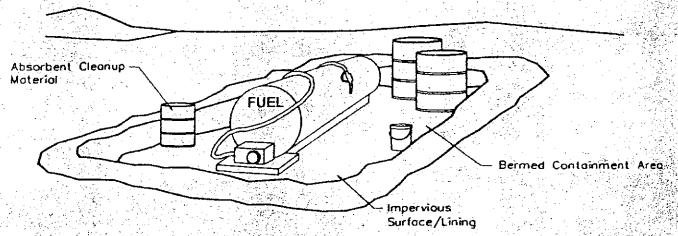


Notes:

- 1. Excess and waste concrete shall not be washed into the street or into a drainage system.
- 2. For washout of concrete and mortar products, a designated containment facility of sufficient capacity to retain liquid and solid waste shall be provided on site.
- 3. Sturry from concrete and asphalt saw cutting shall be vacuumed or contained, dried, picked up and disposed of properly.

G

Vehicle/Equipment Fueling

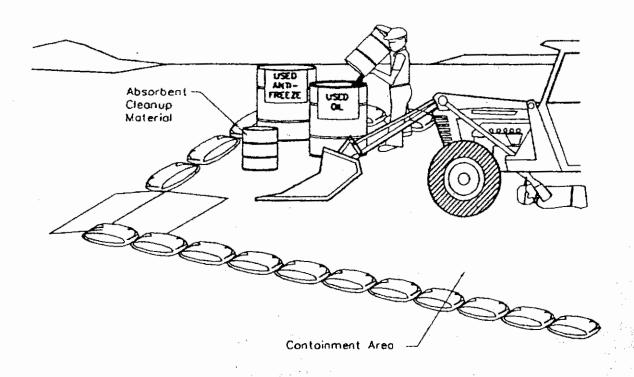


ites:

Fueling shall be performed in a designated area, away from drainage courses.

2. Absorbent cleanup material shall be on site and used immediately in the event of a spill.

Equipment Repair/Maintenance



Notes:

- Leaking vehicles and equipment shall not be allowed on-site. Equipment and vehicles shall be inspected frequently for leaks and shall be repaired immediately. Clean up spills and leaks promptly with absorbent materials; do not flush with water.
- 2. Vehicles and equipment shall be maintained, and repaired on-site only in designated areas. Prevent run-on and run-off from designated areas. Containment devices shall be provided and areas shall be covered if necessary.
- Designate on—site vehicle and equipment maintenance areas, away from storm drain inlets and watercourses.
- 4. Always use secondary containment, such as a drain pan or drop cloth, to catch spills and leaks when removing or changing fluids.
- 5. Legally dispose of used oils, fluids, and lubricants.
- Provide spill containment dikes or secondary containment around stored oil, fuel, and chemical drums.
- 7. Maintain an adequate supply of absorbent spill cleanup materials in designated area.

Chapter III.

Engineering Section

Engineering Practices	NRCS Practice Number
Critical Area Planting Hydro Mulch	342B
Lined Water Way and Outlet	468
Reconstruction of Surface Land Slip	Refer to P.E & C.G.E.
Rock Rip Rap	907

Hydrology Calculations: Completed by Hawks Consulting Engineering. The calculations were completed for a 10 year storm event.

Engineering plans (stamped and signed) are enclosed reflecting the parcels, drain fields, future fill areas, previous fill areas (not a part of this plan) and quantities for each. The NRCS Field Office Technical Guide (FOTG) specifications listed will apply where site specific engineering is not noted. Work is expected to begin in June 2006 and finish with one (1) year.

Geology Assessment and Oversight by J. Nicholas Brouwer C.E.G. is required for the engineered fill and will monitor materials prior to the placement of the imported inert materials. A record of the materials is to be recorded and submitted as a part of the "stamped" documents required for "Certification of Completion". Preliminary slope stability safety factors calculated by the C.E.G. for this project are enclosed in this Chapter.

Signed authorization for the "off site" work on the neighboring property is included in HECO Plan Chapter III and reflected on the signed, stamped engineering drawing.

The imported materials must be "stock piled" and inspected prior to being "placed" in the fill area. This can be accomplished by calculating the quantity for each lift in advance. The fill material shall not be unloaded into the fill area on a truck-by-truck basis unless directly supervised by the design engineer, geologist or persons under their responsible charge.

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OPERATION PLAN

Of the

HILSIDE EROSION CONTROL PLAN

For WAYNE FISHBACK Santa Susana Mountains

The subject property consists of a private ranch owned and operated by Mr. Wayne Fishback. Mr. Fishback is in direct responsible charge of the operations. The engineering services required for the project are being supplied by Hawks and Associates Consulting Engineers of Ventura, California. Geologic consultation is provided by Coastal Geology and Soils Inc.

The subject project has been operating under the HECO 10% exemption clause. Because this clause does not provide for documentation we have met with the administering agency, the Ventura County Resource Conservation District, and have proposed that we produce a formal HECO plan. This plan is in process at this time.

The property is being developed as a productive ranching operation for the breeding of registered Arabian horses and registered cattle. The cattle operation is still being studied as to safety and therefore only grade cattle are presently on the property. With the loss of a valuable Arabian mare in one of the canyons it became obvious that land improvements were necessary. The record rains of 2004 and 2005 also caused numerous landslides and major erosion that needed to be addressed. In addition the recent fires in the area increased the danger of additional land slides and debris production. The reclamation work on the ranch has reduced the potential for debris runoff and slide development. In addition large portions of the ranch natural habitat did not burn in large part due to the fire breaks established by the earthwork operations.

Mr. Fishback has worked to repair the erosion and landslides and create safe pastures for his livestock. This work is a coordinated effort to minimize future landslides, prevent erosion, minimize sediment runoff and retain water resources on the property to the maximum extent possible. This work requires the production of economical stable and non erosive fill and non erosive slope surfaces, the construction of storm water detention basins and non erosive discharge channels. The grass pasture land created will provide natural sediment filters. All of these improvements require construction work and cannot be accomplished as a waste disposal activity.

As the land is the top of a very steep watershed past landslides and erosion has eliminated much of the native soil. In order to accomplish the desired effect under the HECO additional material is needed and we are accepting clean fill dirt, broken concrete and other inert materials that can be used to stabilize the land and create the needed pastures. These fills are commonly known as buttress fills and are described in the attached NRCS publication.

Imported fill is either natural material or salvaged inert materials that the hauler contracts for. The truck driver screens the material both at pick up and unloading. Material is accepted as it becomes available and is placed in a staging area and again screened before it is placed in the

fills. Asphalt is separated and utilized for road construction. Concrete is either separated and used for slope protection or incorporated into the fill as stabilizing material. A fourth screening occurs when the material is spread and inspected before final placement and compaction. No trash is permitted on the property and no dumping activities are taking place. Workers are available on site at all times to monitor deliveries and accept suitable materials.

Several types of fill materials were analyzed for cost effectiveness, life cycle performance and environmental considerations. Three showed promise, traditional engineered fill, a mixture of rock boulders and dirt and a mixture of inert materials and dirt. Traditional engineered fill as specified under the California Uniform Building Code was over 50% more costly than option three. This was due to the more stringent compaction requirements. The extra compaction also used more energy which is an environmental negative. Option two and three had the same placement costs but the boulder material was a minimum of \$50.00 per ton delivered whereas the inert material is free. Option three proved to be as durable as the other options, more cost effective and used less energy.

Only deep canyons and erosive areas of the ranch are included in the fill operations and material will be accepted until the desired pastures and erosion control is realized. The natural features of the land are being protected and enhanced by the operations.

There are presently no structures on the property and no structures are planned in the fill areas. As this is an agricultural operation the material is being placed to accepted BMP standards for agricultural purposes and not to structural standards. All fill areas are keyed into the canyon mouth and all vegetation is stripped from the land to receive the fill. Once the toe of the fill is stabilized the remainder of the material is placed to agricultural standards and wheel role compacted.

Numerous inspections have been conducted on the operations since June of 2005. These inspections have been conducted by Hawks and Associates Consulting Civil Engineers, Coastal Geology and Soils Inc. and numerous Governmental organizations.

Photographs of the ongoing operations are attached and made a part of this plan. The HECO plan will also be included on completion.

Respectfully submitted,

Philip J. Skerman P. E. Senior Engineer

Hawks and Associates

Attach: 1



HAWKS & ASSOCIATES CONSULTING CIVIL ENGINEERS

2259 PORTOLA ROAD, SUITE B VENTURA, CALIFORNIA 93003 TELEPHONE (805) 658-6611 FAX (805) 658-6791

ENGINEERING

PLANNING

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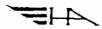
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CALCULATED BY_

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DO 1

email: hawksassoc@prodigy.net--SURVEYING SCALE. 1 TC = 5 M/N F 10M/N 92 F 3.72 PRIMARETER APETER (100 d) 1 m 2 5 2 100 37 3 42 4 10 1 AREA 1. 19 1 4.3 AC 8.46 6.601 1.16 0.96AC 3 6 12 6.16 AC 13.70 21.1 14.1663 635AC 21.7485 £8 555 CF3 3.6 (4) 1.61 AC 03 7 16.9 0+5 4.944 11.005 21.52



HAWKS & ASSOCIATES CONSULTING CIVIL ENGINEERS

ENGINEERING

SHEET NO.

2259 PORTOLA ROAD, SUITE B VENTURA, CALIFORNIA 93003 TELEPHONE (805) 658-6611

PLANNING

CALCULATED BY_

FAX (805) 658-6791

JOB FISH BACH QUANTITIES

email: hawksassoc@prodigy.net--SURVEYING EX15TIN6 SCALE ARGA C-- 12 OF THIS 1=126 FROM ON SITE EX 2-100 1940 6 429 0.085 2-11 C 0.64 1959 0 : 0-960 0,170 2120 28 1960 0.22 1.46 0.33 64 2139 1970 0-44 33 0-570 02 2140 1980 70 2,895 1990 1.09 1389 DABALD - SOIL AND NOTA PART 2000 67 OF STOR WORK ORDER 11145 1970 0 8 2010 0,165 0.775 1989 202C 0 93 520 1.110 1990 0-79 2030 29 395 7.495 2000 2040 080 1725 ٦, 2050 225 2060 ARKA 0,575 2070 0 55 1980 0.24 0.525 0.405 2080 0-50 1996 0-57 0.450 2090 10 6-405 0 22 sogds 3000 1-0 2 3605 685 pds



HAWKS & ASSOCIATES CONSULTING CIVIL ENGINEERS

ENGINEERING

SHEET NO.

OF_____

2259 PORTOLA ROAD, SUITE B VENTURA, CALIFORNIA 93003 TELEPHONE (805) 658-6611

PLANNING

CALCULATED BY DATE

JOB FISHBACK QUANTITIES

FAX (805) 658-6791 CHECKED BY ____ DATE_ email: hawksassoc@prodigy.net -SURVEYING NEW SCALE 2100 C 270 01025 2119 150 0.0 タ/120 028 6,170 20 90 0.34 30 0.86 2100 0.26 2/40 38 0.330 0-40 2110 1.03 0.580 1 030 970 6 4 2 370 1=4070R (400) x10 16,185 pds 13 ARKA 80 TOTAL 0 270 2190 33 165 2200 0.60 01180 02 2210 1.545 722 yds

VEQ DN

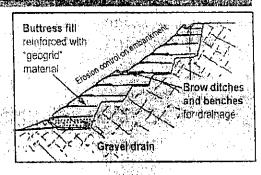
For shallow landslides, successful establishment of vegetation may be an effective way to improve slope stability. The foot networks of particular tree and brush species increase resisting forces by improving tensile strength. Large diameter trees at the toe of a failure may provide buttress support and evapotranspiration decreases soil moisture.

SLOPE MODIFICATION

Laying back a slope to a gentler gradient is an alternative that reduces driving forces by removing/unloading the upper portion of the slide. Slopes are often terraced to provide for surface and subsurface drainage and to accommodate narrow right-of-ways. Feasibility and design must consider where the removed material is to be stockpiled or utilized.

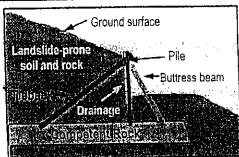
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Buttress fills increase resisting forces by providing lateral support and/or increasing soil strength. Toe buttresses consist of rock or compacted/reinforced soil placed at the toe of the failure to provide lateral support. An alternative is to remove the entire slide mass and replace it with a buttress fill consisting of compacted soil that



may be reinforced with geomembranes or geosynthetics. Prisuling proper drainage is a critical component of design, and larger buttless fills in particular require evaluation and design by a qualified engineer.

STRUCTURAL RETENTION



Structural retention systems increase resisting forces by providing lateral support. Measures include retaining walls, pilings, tieback anchors, and anchored gabions. These measures may be used in combination with soil reinforcement measures that increase internal strength.

Ensuring proper drainage is a critical

component of design. These usually require detailed geotechnical investigations and tend to be expensive to construct.



LANDSLIDES

Davis: California

Updated January 19,2005

NRCS considers slope stability and landslide potential as a part of everyday conservation planning. For existing landslides, NRCS may also be available to provide assistance, particularly where the failures are small and do not pose a significant risk to life and property. Larger, high hazard landslides are, however, complex geotechnical problems that may require the services of a professional engineering geologist or geotechnical engineer.

CLASSIFICATION OF LANDSLIDES

"Landslide" is a general term that describes the movement of rock, debris, or soil down a slope under the influence of gravity. Landslides are classified by the type of material (rock, debris, earth) and how it moves (falls and topples, slides, and flows). Correct classification is important because triggering mechanisms and management measures may be different.







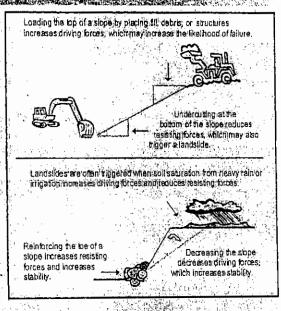
Potential hazards associated with continued or renewed slope failure, and what to do about them, depend on what's all stake; an unstable slope poised to deliver large volumes of mud and rock to a residential area, would represent a high hazard situation that calls for a detailed investigation and quick action to reduce the hazard. Landslides in open areas that do not pose a hazard to life or property may only require a qualitative evaluation, monitoring, and proper land use management.

GEOTECHNICAL SITE INVESTIGATIONS

Engineering geologists and geotechnical engineers work together to determine what factors contribute to instability and what triggered the landslide. They look at rainfall records and aerial photos; study geology and seil maps; and review other reports that describe historical land use, cover, and slope conditions. Reports may also be available that evaluate slope stability at or in the area around the site. In the field, they characterize the rock of soil material in terms of its composition, texture, and strength, they identify discontinuities such as bedding planes, faults, and fracture zones; they evaluate surface drainage and subsurface groundwater, and they work to define the shape and size of the failure including the location of the failure plane. In order to adequately characterize the site, the study area should always extend beyond the bounds of the existing slide. Some failures may actually be a part of a larger, compound slide. A subsurface investigation is often conducted as a part of a detailed geotechnical investigation, but may not be required in low or moderate hazard situations.

LANDSLIDE FORCES

Slopes are considered stable when the resisting forces (defined by the strength of the material) exceeds those forces that drive a slope towards failure. Failure occurs when a triggering mechanism, such as intense rainfall, shifts the balance by rapidly increasing the driving forces and/or decreasing the resisting forces. Other potential triggering mechanisms include earthquakes, rapid water level changes, streambank erosion, imigation, and excavation for roadcuts or



building pads. Natural events or land use activities may not be identified as a triggering mechanism, but may contribute to failure by lowering the slope's threshold for failure, making it more likely that failure will occur in response to some triggering event.

REDUCING LANDSLIDE HAZARDS

Landslide hazard reduction may be accomplished by:

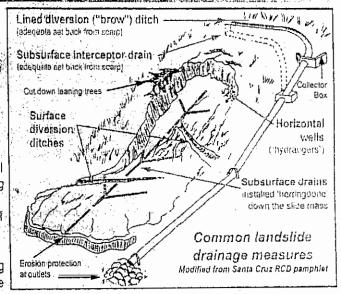
- 1. Relocating structures and moving property out of harm's way;
- 2. Deflecting or intercepting flow material and either storing it in debris basins, or conveying it through adequately sized channels or floodways;
- 3. Decreasing driving forces that trigger failure; and
- 4. Increasing those forces that resist failure.

The first two approaches consider land uses in the vicinity of the landslide and may require easements, acquisition, and/or condemnation. In addition, adequate storage or conveyance capacity must be available.

The second two approaches address slope stability directly. The following methods are commonly used, often in combination, to reduce the probability that slope fallure will occur during dry to normal rainfall years:

DRAINAGE

Intercepting and removing surface and/or subsurface water is one of the most common approaches to landslide management. Removing excess water from the soil increases resisting forces by increasing internal strength, and reduces driving forces by reducing loading. Drainage methods include

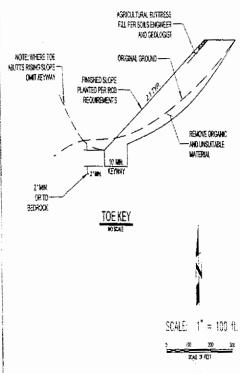


surface diversions, roof runoff management, subsurface drains, grading to reduce infiltration through cracks, and others. Covering the slide with plastic to reduce infiltration is discouraged; installation and maintenance can be difficult, soil moisture is retained, and the plastic may obscure incipient failure.

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GENERAL NOTES

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- 2. CRITICAL AREA AND MITIGATION PLANTING SHILL BE ESTUBLISHED ON ALL DISTRIBED SLORES SOAS NOT TO EXCEED AN ANNUAL SOIL LOSS OF 16 TIONS PER ACRE AS CALCULATED BY THE UNIVERSAL SOIL LOSS EQUATION.
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 - 6. CA-READ CRITICAL AREA PLANTING EROSION CONTROL
 - BLANKET, ONTICAL AREA PLAYING HITPOSEEDING
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 - RECONSTRUCTION OF SURFACE LAVO SLIP, REFER TO FE & COE
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SANTA SUSANA MT. - AGRICULTURAL GRADING FOR WAYNE FISHBACK . MORTH AMERICAN CUTOFF — SIMI VALLEY, CA

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Coastal Geology & Soil Inc.

- Soil and Geotechnical Engineering
- Engineering Geology
- Hydrogeology

April 20, 2006

Reference V06105

Wayne Fishback 3106 Calusa Ave Simi Valley Ca 93063

Subject:

Engineering Geologist of Record for the Hillside Erosion Control Plan to be Implemented on the Fishback Ranch, North American

Cutoff, Simi Hills, County of Ventura, California.

Dear Mr. Fishback:

Per your request, Coastal Geology & Soil, Inc. (CGS) is pleased to provide you with this letter documenting that we are Engineering Geologist of Record for the Hillside Erosion Control Plan (HECO) to be implemented on your Fishback Ranch project. North American Cutoff, Simi Hills, County of Ventura, California. It is our understanding that you are in the process of developing an operation plan as part of the HECO. We further understand that Hawks and Associates, has been providing civil engineering consulting services for ongoing filling operations and is in the process of development of the HECO operations plan. We are in receipt of and have reviewed a document prepared by Hawks and Assoicates titled "Operation Plan of the Hillside Erosion Control Plan" for Wayne Fishback, Santa Susana Mountains.

The HECO operation plan will cover three areas where filling operations are proposed. The primary purpose of the filling operations is to stabilize specific areas of your ranch where erosional problems have historically damaged existing access roads and to provide relatively level areas for agricultural purposes. The fill areas are not proposed to be utilized as engineered fill pads for the future construction of structures suitable for human habitation, and as such, the specifications and standards to be developed under the proposed HECO operation plan, are not designed to provide engineered fill pads suitable for the future construction of such structures. The standards to be developed under the proposed HECO operations plan are designed to provide stabile fill areas for agricultural purposes in accordance with standard engineering design criteria.

Proposed filling operations will primarily incorporate imported clean fill soil, inert concrete rubble, and native sandstone boulders. No significant

amounts of organic materials are proposed to be utilized in filling operations. The owner has and will continue to provide personnel onsite during all import operations and all truck loads of proposed fill material will be inspected by a representative of the owner to insure that the imported material is acceptable for filling operations and is consistent with the HECO operations plan.

The scope of services for our portion of the project will include providing Engineering Geologic design recommendations appropriate for the proposed fill areas, field monitoring of filling operations for compaction criteria, and general geological and geotechnical observation, documentation, and recommendations as necessary. Upon completion of the project, we will provide a report documenting our observations, test results, and conclusions and recommendations.

CGS appreciates the opportunity to work on your project. If we can be of further assistance, please feel free to contact us at 805-647-2842 (office) or 805-218-6381 (cell).

Sincerely, Coastal Geology & Soil, Inc.

Nick Brouwer,

Project Manager

Certified Engineering Geologist, C.E.G. 2076

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Coastal Geology & Soil Inc.

- Soil and Geotechnical Engineering
- Engineering Geology
- Hydrogeology

June 12, 2006

Reference V06105

Wayne Fishback 3106 Calusa Ave Simi Valley Ca 93063

Subject:

Preliminary Slope Stability Analysis on the Area A - Lower Fill, Located on the Fishback Ranch, North American Cutoff, Simi Hills, County of Ventura, California.

Dear Mr. Fishback:

Per your request, Coastal Geology & Soil, Inc has performed some preliminary slope stability analyses on the Area A - Lower Fill located on the Fishback Ranch. North American Cutoff, Simi Hills, County of Ventura, California. Our office is in receipt of a set of preliminary grading plans prepared by Hawks and Associates, which show the location and proposed finish grade contours of the Area A fill. We understand that the subject grading plan is preliminary and is subject to change prior to finalization. As such, our preliminary slope stability calculations are intended only as a general indication of the potential stability of the proposed fills. Additional geotechnical testing and analyses are required inconjunction with the final grading plan contours to complete our slope stability analyses.

In general, slope stability calculations compare the driving forces of a slope, which would cause it to fail, against resistive forces, which would tend to maintain the slope in-place. Based on the slope stability calculations, a value is calculated which is referred to as the Factor of Safety (FS). A FS value of 1.0 means that the slope is in borderline equilibrium. A FS value of greater than 1.0 means that the slope is currently stable, whereas a FS value of less than 1.0 means that the slope is in failure or will likely fail soon. For example, a FS value of 1.5 means that the slopes resistive force to sliding is 150% of the minimum required for the slope to stand.

Gross stability analyses were conducted on a representative cross section through the lower fill section of Area A. For slope stability calculations, the Bishop's Modified method was used for circular fallures. Gross stability calculations were conducted on a large section of the lower slope, extending from approximate elevation +1940 to +2015 msl. In each of the gross stability analyses, numerous trial failure surfaces were initiated from various locations on the slope to search for the minimum factors of

safety. A piezometric surface was not modeled, because ground water levels are not known at present, however high ground water levels are not expected to occur at the site. It is also our understanding that concrete rubble in quantities sufficient to increase subsurface drainage in the fill areas exists. The existence of concrete rubble in the fill may help to decrease subsurface saturation. However, if periodic seeps, ground water, or pore pressures do occur, they would decrease the factors of safety calculated in the gross slope stability analyses performed herein. analyzes also were not modeled, because the bedding planes are not expected to be adverse. Geotechnical soll parameters were assumed based on observed soils at the site. Further geotechnical testing will be required to confirm the soil parameters. The stability analyses were performed for three potential cases: 1) static analyses of fill material consisting of soil without concrete rubble, 2) static analyses of fill material consisting of soil with concrete rubble, and 3) fill material consisting of soil material without concrete rubble under pseudostatic conditions.

Results of the Bishops modified gross stability analyses conducted on the subject slope indicates that the preliminary stability of the slope at the critical locations tested utilizing fill material without concrete rubble yielded a static factor of safety ranging from 1.69 to 1.92. Preliminary stability analyses of the slope at the critical locations tested utilizing fill material with concrete rubble yielded a static factor of safety ranging from 1.92 to Stability analyses performed for pseudostatic (seismic) conditions considered a required horizontal earthquake coefficient factor of 0.15. Results of the pseudostatic gross stability analyses conducted Indicate that the slopes at the critical locations tested had a minimum pseudostatic factor of safety of 1.24. As such, all slopes tested were preliminarily found to be stable to within the minimum factor of safety requirements of 1.5 for static and 1.1 for pseudostatic conditions.

CGS appreciates the opportunity to work on your project. If we can be of further assistance, please feel free to contact us at 805-647-2842 (office) or 805-218-6381 (cell).

Sincerely, Coastal Geology & Soil, Inc.

Nick Brouwer,

Certified Engineering Geologist, C.E.G. 2076

BEFR B. GOLGWANDER

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Venture County
Resource Conservation District
P.O. Box 147
3380 Somis Road
Somis, CA \$3066

Attention: Mr. Dale Dean, Engineer

Subject: CONSENT TO OFF-SITE CONSTRUCTION

Gentiemen:

I hereby certify that I am the minority tiwher of the property described as Assessor's Parcel No. 649-0-010-415.

I hereby consent to construction on my property in accordance with the plans prepared by Hawks and Associates, Project No. 200, designed by P.Shennan, and drawn by D. Wilkinson depecting the Santa Susana Mt. – Agricultural Grading.

And further agree to hold the County of Ventura and Ventura County Resource Conservation District free and clear of any damage to our property triving from said construction.

Dated:

Signed.

Catarina Grace-Hardy

Trustue of the Catarina-Grace-Hardy Revocable Trust

6-16-06 Here is the off-site consent. Jonach Jonach owns a 93% share of the land. Stee is getting use another form for the 17. Thanks again for your tremendous help and support. Your low keyed presentation on Tuesday was excellent. In fact your you got the support of the Open Broad wender there making it a unanimous decision by the Board which I believe is noteworthy. A split decision would have been controversial and could have led to problems in ongoing discussion with EHD and other unmertiaced solitical forces.

No. 7346 F 1

Ventura County
Resource Consorvation District
P.O. Box 147
3380 Somis Road
Somis, CA 93066

Attention: Mr. Dale Dean, Engineer

Subject: CONSENT TO OFF-SITE CONSTRUCTION

Gentlemen:

I hereby certify that I am the majority owner of the property described as Assessor's Parcel No. 649-0-010-415.

I hereby consent to construction on my property in accordance with the plans prepared by Hawks and Associates, Project No. 200, designed by P. Sherman, and drawn by D. Wilkinson depicting the Santa Susana Mt. — Agricultural Grading.

And further agree to hold the County of Ventura and Ventura County Resource Conservation District free and clear of any damage to our property arising from said construction.

Michael J. Joneich

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Date

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NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

CRITICAL AREA PLANTING

(acre) CODE 342

DEFINITION

Planting vegetation, such as trees, shrubs, vines grasses, or legumes, on highly erodible or critically eroding areas (does not include tree planting mainly for wood products).

PURPOSES

To stabilize the soil, reduce damage from sediment and runoff to downstream areas, and improve wildlife habitat and visual resources.

CONDITIONS WHERE PRACTICE APPLIES

On highly erodible or critically eroding areas that cannot be stabilized by ordinary conservation treatment and management and if left untreated can cause severe erosion or sediment damage. Examples of applicable areas are sand dunes, dams, dikes, mine spoil, levees, cuts, fills, surface-mined areas, and denuded or gullied areas where vegetation is difficult to establish by usual planting methods.

CRITERIA

Selected plants, numbers, seeding mixtures and rates shall be in conformance with the respective Major Land Resource Area (MLRA) Vegetative Guide in Section II of the Field Office Technical Guide.

Based on bag tags, adjust seeding rates at the field site to insure the required amount of pure live seed (PLS)(germination x purity). Do not include any hard seed in the percent germination. When coated seed is used, adjust seeding rate to compensate for the weight of coating.

Use straw mulch on plantings made in summer and when animal or foot traffic is expected to interfere.

CONSIDERATIONS

These sites are generally severely eroded or disturbed and have low fertility and few, if any, resident seeds.

High seeding and fertilizer rates are needed to insure adequate vegetative cover.

Stabilized sites are expected to have locally adapted species invade the site and provide long-term stability.

When sites are reshaped, creating smooth hard surfaces on final grading causes compaction and makes it difficult to prepare a good seedbed.

The horizontal indentations left by tracked equipment provides a suitable seedbed on steep slopes.

Most California soils are low in sulfur. Preference should be given to fertilizers with this element. Ammonium Phosphate Sulfate 16-20-0 contains 15 percent sulfur and is the preferred fertilizer when seeding mixtures of grasses and legumes.

Straw is the preferred mulch but needs to be anchored in place. Rollers and crimpers can be pulled on slopes up to 3 to 1. Where there is access, equipment can be winched up and down steeper slopes. Tackifiers can be used to anchor the straw when equipment cannot be used on the site.

Use of wheat straw will result in less volunteer grain compared to barley straw.

When using straw grown in the same county, use clean straw to minimize spread of noxious weeds. Encourage users to have straw inspected by the County Agricultural Commissioner.

Use 75 feet as the effective range for straw blowing equipment.

Use 125 feet as the effective range for hydroseeders. When a 100-foot hose is available, the range can be extended up to 200 feet.

When seeding grasses, apply nitrogen at the rate of 80 pounds per acre (500#/acre of 16-20-0) except if soils are coarse sandy, gravelly or granitic, fertilizer rates can be reduced 50 percent.

OKS, CA July, 2000 When seeding legumes, fertilize with the equivalent to 44 pounds per acre of phosphorus (500#/acre of 16-20-0).

When water quality is expected to be adversely impacted by leached fertilizer, reduce fertilizer rates by 50 percent.

When planting perennial grasses, the fertilizer rate can be reduced by 50 percent.

When fertilizer rates are reduced, the balance of the fertilizer needs to be applied at the beginning of the next growing season.

Use hydro-mulch planting on steep, inaccessible sites not suitable for straw mulch planting and on other sites when rain is expected within 60 days following planting; except, do not use when high winds or animal or foot traffic are expected to interfere.

The split hydro-mulch planting can be used when small seeds will be planted on sites suitable for hydromulch planting. Seed and fertilizer are hydroseeded on first to provide better seed to soil contact and then the rest of the wood fiber is hydromulched over the site.

Bermudagrass sprigs and plugs should only be planted in areas having adequate soil moisture throughout the summer. On sloping banks, the first row is at the waterline and additional rows are numbered going up the bank. For water impoundment's with fluctuating water levels, use the average waterline expected during the active growing season.

When plantings are to be irrigated, maintain adequate moisture in the upper six (6) inches of soil during the first four (4) weeks and then in the upper 12 inches thereafter until the rainy season.

Limit human and livestock use of the area as needed to protect the plant cover.

Stabilization of interior and coastal sand dunes

The foredune to be created or stabilized must be a sufficient distance upwind to avoid having the base encroach on the area to be protected as the dune forms or increases in height. Proper distance can be best estimated by observing mature dune dimensions adjacent to the area receiving treatment. Ordinarily 300 to 500 feet of base width will be required.

Interior Sand Dunes

Use both woody and herbaceous types of plantings for permanent vegetative stabilization.

Initial stabilization of active dunes or sand blow areas:

Use wind controlling fences or artificial windbreaks as necessary to still sand on the area to be treated. Fence should be of uniform height placed across the prevailing wind direction. Three to five fences at approximately 50-foot intervals may be required.

Use a mulch to help stabilize the sand until vegetation is established.

Install and test the irrigation system to be used prior to planting.

Make plantings of the woody materials selected at the upwind edge of the area-or dunes.

Extend plantings down wind over the dune as new dune area forms.

Establish a solid windbreak of plants at the down wind edge of dunes as soon as possible. See practice 380 - Windbreak / Shelterbelt Establishment.

Introduce long-lived, low maintenance plant species as needed to assure permanent stabilization of the treated area.

Coastal Sand Dunes

Initial Stabilization of active dunes:

If sand fences or artificial windbreaks will be required to still sand movement while establishing beachgrass, select locations for one or more fences beyond the high tidewater mark. Fences to create the foredune will be placed perpendicular to the prevailing wind at uniform height and about 30 feet apart. The fences may require lifting to keep from being buried as the foredune takes shape.

During December, January, or February plant culms of European beachgrass, Ammophilia arenaria or another suitable species to create a foredune or add height to an existing foredune. Where space permits, planting should be extensive enough to provide a dune base width of 400 to 500 feet. The grass culms should be from vigorous young plants harvested to provide at least one underground node





per culm or stem. Tops of the culms should be cut back to 20 inch length for easy handling. The culms will be planted on approximate 18-inch centers, 3 per hill. Planting depth should be about 12 inches with about 8 inches of top protruding above the soil surface. The bundles of plant material must be maintained in live, moist conditions until planted.

Plant from windward to leeward, continuing in annual increments until the total unstable area is under control.

Apply nitrogen fertilizer (preferably 16-20-0) over the planted area at the rate of 20 pounds of nitrogen per acre. Fertilizer applied during gentle rain or irrigated in immediately will prove most effective. Fertilize again at the same rate about three months later. Do not use ammonium sulfate (21-0-0).

Supplemental planting on beachgrass stabilized dunes:

- During the fall months, introduce adapted and enduring species of trees, shrubs, and other plants into the beachgrass cover using methods that will not damage the cover.
- Provide protection from rabbits, insects, and disease as necessary during establishment of the supplemental planting.

Careful evaluation is needed to avoid disturbing Ecologically Significant Areas. Dunes often support threatened and/or endangered plants and animals.

Selection of vegetative species should consider local opinion on use of introduced species.

In most areas, irrigation water will be necessary for establishing and maintaining vegetative cover.

Where rainfall is adequate or irrigation water available, barley or sudangrass can be used successfully to grow mulch in place where sand blow areas need such treatment to keep sand from being removed. Also asphalt emulsions and certain other chemicals have been used successfully as spray on materials for temporary sand blow control to permit establishment.

Initial stabilization may require use of board or slat fencing to trap sand while vegetative cover is being established.

Endangered Species Considerations

Determine if installation of this practice with any others proposed will have any effect on any federal or state listed Rare, Threatened or Endangered species or their habitat. NRCS's objective is to benefit these species and others of concern or at least not have any adverse effect on a listed species. If the Environmental Evaluation indicates the action may adversely affect a listed species or result in adverse modification of habitat of listed species which has been determined to be critical habitat, NRCS will advise the land user of the requirements of the Endangered Species Act and recommend alternative conservation treatments that avoid the adverse effects. Further assistance will be provided only if the landowner selects one of the alternative conservation treatments for installation; or at the request of the landowners, NRCS may initiate consultation with the Fish and Wildlife Service, National Marine Fisheries Service and/or California Department of Fish and Game. If the Environmental Evaluation indicates the action will not affect a listed species or result in adverse modification of critical habitat, consultation generally will not apply and usually would not be initiated. Document any special considerations for endangered species in the Practice Requirements Worksheet.

Some species are year-round residents in some streams, such as, freshwater shrimp. Other species, such as steelhead and salmon, utilize streams during various seasons. Be aware that during critical periods, such as spawning, eggs in gravel's, and rearing of young may preclude activities in the stream that may directly affect the stream habitat during those periods. For example there should be no disturbance of stream gravel beds that may have eggs in them. That could include any equipment in the stream or even walking in the stream or work upstream that may result in sediment depositing in the gravel beds. Document any special considerations for endangered species in the Practice Requirements Worksheet.

Water Quantity

Critical area planting may have a minor effect on the quantity of surface and ground water. If there are large areas involved, as in mined land reclamation, there may be a reduction of surface runoff and increased infiltration and percolation.

 Effects on the water budget, especially on volumes and rates of runoff, infiltration, evaporation, transpiration, deep percolation, and ground water recharge.

- Effects of vegetation management on soil moisture.
- Effects of snowcatch and melt on the water budget.
- 4. Effects of increased organic matter on water holding capacity of the soil.
- Potential for a change in plant growth and transpiration because of changed in soil water volume.

Water Quality

This practice may reduce soil erosion and sediment delivery to surface waters. Plants may take up more of the nutrients in the soil, reducing the amount that can be washed into surface waters or leached into ground water. This practice may reduce wind blown soil delivery to surface waters.

Excessive fertilizer applications can increase the amount of nutrients leached into ground water.

During grading, seedbed preparation, seeding, and mulching, large quantities of sediment and associated chemicals may be washed into surface waters prior to plant establishment.

- Effects on erosion and the movement of sediment and soluble and sediment-attached substances carried by runoff.
- Filtering effect of vegetation on movement of sediment and dissolved and sediment-attached substance.
- Short-term and construction-related effects on downstream water courses.
- Potential for earth moving to uncover or redistribute toxic materials and effect on water or vegetation.
- Effects on the use and management of nutrients and pesticides and resulting effects on surface and ground water quality.
- Effects on the visual quality of downstream water resources.

This practice may reduce wind blown soil delivery to surface waters. Plants may take up more of the nutrients in the soil, reducing the amount that can be washed into surface waters or leached into ground water.

 Excessive fertilizer applications can increase the amount of nutrients leached into ground water.

PLANS AND SPECIFICATIONS

Plans and specifications are to be prepared for each field or treatment area and include species of grasses, legumes, shrubs, and trees; methods and rates of planting; fertilizer and lime requirements; planting site preparation; time of planting; mulching; and irrigation.

Specify wheat straw rather than barley straw where volunteer growth is not desirable.

When straw mulch cannot be anchored by rollers or crimping equipment, use tackified straw planting. Use caution on decomposed granitic soils since some react adversely to mulch being anchored.

The acceptable time period for obtaining woody cuttings from host plants can be listed on the Practice Requirements sheet.

Specify the best window of time for planting at each site. At higher elevations, this might be August 15 to September 15 to obtain enough growth after the first rain before it gets too cold. September 15 to October 15 is used in some lower elevation areas and October 15 to November 15 in other areas. Wheat and barley can be successfully planted in November and December in some areas. Use local knowledge of the rainfall pattern, temperature, wind conditions, and growth characteristics of the species being planted to determine the window of time for planting.

Identify the water source, method of irrigation, and irrigation water management.

Show the type of fence to use, spacing between fences, and direction of fences and windbreaks on the drawings.

Identify the kind of mulch that will be used, plus the amount and method of anchoring.

Identify the fertilizer to use, application rate, method of applying fertilizer, and timing.

Provide for crowd control, including animals and vehicles.

OPERATION AND MAINTENANCE

Maintenance needed for this practice includes replanting areas with less than 60 percent vegetative cover, periodic fertilizer applications, control of noxious weeds, replacing dead trees and shrubs, periodic inspections of the treatment area, and control of pest infestations.

Equipment will be operated in a safe manner and underground utilities marked before work begins.

Plans must include provisions for excluding people, livestock, and vehicular traffic during and following establishment of vegetative plantings. Recreational use of the planted area must be controlled as necessary to avoid damaging the vegetation.

Long-term provision for maintenance will be needed following the initial planting. Blowouts that require replanting commonly occur during initial establishment. Also, more enduring plants will need to be added after initial stabilization. Occasional applications of nitrogen fertilizer will be required to maintain dense vigorous grass cover.

July, 2000

NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE SPECIFICATION

342B - CRITICAL PLANTING AREA - HYDRO MULCH

I. SCOPE

The work shall consist of furnishing all materials and placing them on all exposed, disturbed, or barren areas within the project area or site to the limits as show on the drawings or as staked in the field.

II. MATERIALS

Seed

All seed shall be delivered to the site tagged and fabeled in accordance with the California Agricultural Code, and shall be acceptable to the County Agricultural Commissioner.

Bag tag figures will be evidence of purity and germination. Time since date of seed test shall not exceed 9 months.

Seed shall be of a quality that weed seed shall not exceed 0.5 percent of the aggregate of pure live seed (PLS) (percent germination x percent purity) and other material.

Fertilizer

Unless otherwise specified on the Practice Requirements sheet, all fertilizer shall be Ammonium Phosphate Sulfate containing a minimum of 16 percent Nitrogen, 20 percent available phosphoric acid and 0 percent water soluble potash and be uniform in composition, dry and free flowing, pelleted or granular.

All fertilizer shall be labeled in accordance with applicable state regulations and bear the warranty of the producer for the grade furnished.

Inoculants

The inoculant for treating legume seeds shall be a pure culture of Nitrogen fixing bacteria prepared specifically for the plant species and shall not be used later than the date indicated on the container. A mixing medium, as recommended by the manufacturer or approved substitute, shall be used to bond the inoculant to the seed. For nonpellet inoculated seed, two times

the amount of the inoculant recommended by the manufacturer shall be used and seed shall be sown with 24 hours.

For pellet inoculated seed, at least 30 pounds of inoculant shall be used per 1,000 pounds of raw seed and the seed shall be labeled to show the Lot Number, Expiration Date, and Percent Coat of the finished product. Pellet inoculated seed shall be kept cool and sown within 180 days.

Wood Fiber

Wood fiber shall be a wood cellulose fiber that contains no germination nor growth inhibiting factors. The wood fiber shall be produced from nonrecycled wood such as wood chips or similar wood materials and shall have the property to be evenly dispersed and suspended when agitated in water. It shall be colored with a nontoxic water soluble green dye to provide a proper gauge for metering of material over ground surfaces.

The wood fiber mulch may also be produced from the following materials:

- recycled wood fiber, such as wood chips or similar wood materials
- a combination of recycled newsprint and cardboard materials that contain at least 50 percent cardboard, or
- a combination of recycled newsprint and nonrecycled wood fiber or recycled wood fiber materials that does not contain more than 50 percent newsprint

Tackifier

Tackifier material shall be one of the following or other material specified on the Practice Requirements sheet and shall have the property to be evenly dispersed and suspended in water when agitated: M-Binder, Sentinel, Ecotak-SAT, Fish-STIK, and Soil Master WR.

III. SEEDING MIXTURE AND PLANTING DATE

The seed(s) and rate(s) specified on the Practice Requirements sheet shall be used. The seeding rate(s) shall be the weight exclusive of any coating material. Any legume seed used shall be inoculated. Based on bag tags, seeding rates shall be adjusted to insure the required amounts of pure live seed.

Planting shall be performed after final grading is completed unless otherwise specified on the Practice Requirements sheet.

IV. SEEDBED PREPARATION

The area to be planted shall be weed free and have a firm seedbed which has previously been roughened by scarifying, disking, harrowing, chiseling, or otherwise worked to a depth of 2 to 4 inches. No implement shall be used that will create an excessive amount of downward movement of clods on sloping areas. Seedbed may be prepared at time of completion of earth moving work.

Rocks larger than 6 inches in diameter, trash, weeds, and other debris that will interfere with seeding or maintenance shall be removed.

Seedbed preparation shall be suspended when soil moisture conditions are not suitable for obtaining a satisfactory seedbed.

V. FERTILIZING, SEEDING, MULCHING

Fertilizing

Fertilizer shall be distributed uniformly over the seedbed at the rate of 500 pounds per acre unless a different amount is specified on the Practice Requirements sheet.

Fertilizer shall be applied hydraulically by hydroseeder in the form of a slurry that also contains the required seed. Fertilizer shall not remain in the slurry longer than two (2) hours.

Seeding and Mulching

Seed shall be distributed uniformly in a water slurry by hydroseeder.

The hydroseeder shall be equipped with a built-in continuous agitation system of sufficient operating capacity to produce a homogeneous slurry and a

discharge system which will apply the slurry to the slopes at a continuous and uniform rate.

Seed shall not remain in the slurry longer than thirty (30) minutes. The slurry shall also contain wood fiber at the rate of 1500 pounds per acre, tackifier, and the required fertilizer unless otherwise specified on the Practice Requirements sheet. The wood fiber shall not remain in the slurry longer than two (2) hours. Water used shall be potable water or Class 1 or 2 agricultural irrigation water.

Application rates for wood fiber mulch products that have moisture contents greater than 15 percent shall be increased by the following factor, c:

The application rate of the tackifier shall be:

Rate	Wood Fiber Mulch
1001bs	1,500 to 2,000lbs
100 i bs	1,500 to 2,000lbs
100lbs	1,500 to 2,000lbs
100lbs	1,500 to 2,000lbs
100gal	2.000 to 2,500lbs
	1001bs 1001bs 1001bs 1001bs

The slurry shall be continuously mixed and shall be mixed for at least five (5) minutes after the last addition before application starts. The slurry shall be applied uniformly over the site at a rate that is nonerosive and minimizes runoff.

VI. IRRIGATION

When specified, irrigation water shall be applied at the times and rates as listed on the Practice Requirements sheet.

VII. SPECIAL MEASURES

Measures and methods that enhance fish and wildlife values, protect visual resources, and maintain key shade, food, and den trees shall be performed when specified on the Practice Requirements sheet.

VIII. OTHER REQUIREMENTS

Other details for the establishment and maintenance of the plants including, but not limited to, the need for livestock and traffic control shall be applied when specified on the Practice Requirements sheet.



Operations shall be done in such a manner that erosion and air and water pollution are minimized and held with legal limits.

The owner, operator, contractor, or other persons shall conduct all work and operations in accordance with proper safety codes for the type of equipment and operations being performed with due regards to the safety of all persons and property.

Natural Resources Conservation Service

STATEMENT OF WORK Critical Area Planting (342)

These deliverables apply to this individual practice. For other planned practice deliverables refer to those specific Statements of Work.

DESIGN

Deliverables:

- Design documents that demonstrate criteria in NRCS practice standard have been met and are compatible with planned and applied practices
 - a. Practice purpose(s) as identified in the conservation plan.
 - b. List of required permits to be obtained by the client
 - c. List all required and/or facilitating practices
 - d. Practice standard criteria-related computations and analyses to develop plans and specifications including but not limited to:
 - i. Planting dates
 - ii. Site and seedbed preparation
 - iii. Soil amendments required
 - iv. Species selection, seeding or planting rates and establishment method
 - v. Type and amount of mulch required
- 2. Written plans and specifications including sketches and drawings shall be provided to the client that adequately describes the requirements to install the practice and obtain necessary permits.
- 3. Operation and maintenance plan
- 4. Certification that the design meets practice standard criteria and comply with applicable laws and regulations
- 5. Design modifications during application as required

INSTALLATION

Deliverables

- 1. Pre-application conference with client
- 2. Verification that client has obtained required permits
- 3. Staking and layout according to plans and specifications including applicable layout notes
- 4. Application guidance as needed
- 5. Facilitate and implement required design modifications with client and original designer
- Advise client/NRCS on compliance issues with all federal, state, tribal, and local laws, regulations and NRCS policies during application
- 7. Certification that the application process and materials meets design and permit requirements

CHECK OUT

Deliverables

- 1. Records of application
 - a. Extent of practice units applied
 - b. Actual materials used
- 2. Certification that the application meets NRCS standards and specifications and is in compliance with permits
- 3. Progress reporting

REFERENCES

- NRCS Field Office Technical Guide (eFOTG), Section IV, Conservation Practice Standard Critical Area Planting - 342
- · NRCS National Agronomy Manual
- NRCS National Environmental Compliance Handbook
- NRCS Cultural Resources Handbook

NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

LINED WATERWAY OR OUTLET (feet) CODE 468

DEFINITION

A waterway or outlet having an erosion-resistant lining of concrete, stone, synthetic turf reinforcement fabrics, or other permanent material. The earth above the permanent lining may be vegetated or otherwise protected.

Scope

This standard applies to waterways or outlets having linings of non-reinforced, cast-in-place concrete; flagstone mortared in place; rock riprap; or similar permanent linings. It does not apply to irrigation water conveyance, grassed waterways with stone centers or small lined sections to carry prolonged flows.

PURPOSE

This practice may be applied as part of a resource management system to support one or more of the following purposes:

- Provide for safe conveyance of runoff from conservation structures or other water concentrations without causing erosion or flooding
- Stabilize existing and prevent future gully erosion
- · Protect and improve water quality

Properly designed linings may also control seepage, piping, and sloughing or slides.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies if the following or similar conditions exist:

- Concentrated runoff, steep grades, wetness, prolonged base flow, seepage, or piping is such that a lining is needed to control erosion.
- 2. Use by people or animals precludes use of

vegetation waterways or outlets.

- Limited space is available for design width, which requires higher velocities and lining.
- Soils are highly erosive or other soil or climatic conditions preclude using vegetation only.
- Steep grades, wetness, prolonged base flow, seepage, or piping would cause erosion.
- Installation of non-reinforced concrete or mortared flagstone linings, shall be made only on low shrink-swell soils that are well-drained or where subgrade facilities are installed.

CRITERIA

General Criteria Applicable To All Purposes

Capacity. The maximum capacity of the waterway flowing at designed depth shall not exceed 200 ft³/s. The minimum capacity shall be adequate to carry the peak rate of runoff from a 10-year, 24-hour frequency storm. Velocity shall be computed by using Manning's Formula with a coefficient of roughness "n" as follows:

Lining	"n" Value	
Concrete		
Trowel finish	0.012 - 0.014	
Float finish	0.013 - 0.017	
Shotcrete	0.016 - 0.022	
Flagstone	0.020 - 0.025	
¹ Riprap - (Angular Rock)	$n = 0.047(D_{50} S)^{0.147}$	
Synthetic Turf Reinforcement Fabrics and Grid Pavers	Manufacturer's recommendations	

1/ Applies on slopes between 2 and 40% with a rock mantle thickness of 2 x D_{50} where:

 D_{50} = median rock diameter (in.),

S = lined section slope (ft./ft.) (.02 \leq S \leq .4)

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard contact your Natural Resources Conservation Service <u>State Office</u>, or download it from the <u>electronic Field Office Teclinical Guide</u> for your state.

NRCS, CA June 2006 Velocity. Maximum design velocity and rock gradation limits for rock riprap-lined channel sections shall be determined using Appendix 16A, Engineering Field Handbook for slopes less than 2 percent.

Stable rock sizes and flow depths for rock-lined channels having gradients between 2 percent and 40 percent shall be determined using the following detailed design process. This design process is from Design of Rock Chutes by Robinson, Rice, and Kadavy.

For channel slopes between 2% and 10%:

$$D_{50} = [q(S)^{1.5}/4.75(10)^{-3}]^{1/1.89}$$

For channel slopes between 10% and 40%:

$$D_{50} = [q(S)^{0.58}/3.93(10)^{-2}]^{1/1.89}$$

$$z = [n(q)/1.486(S)^{0.50}]^{3/5}$$

D₅₀ = Particle size for which 50% of the sample is finer, in.

S = Bed slope, ft./ft.

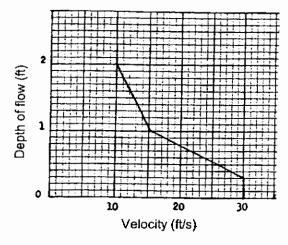
z = Flow depth, ft.

q = Unit discharge, ft³/s/ft

(Total discharge+Bottom width)

Maximum design velocity for concrete-lined sections should not exceed those using Figure 2.

Figure 2. Maximum velocity versus depth of flow for concrete-lined channels



Maximum design velocity for synthetic turf reinforcement fabrics and grid pavers shall not exceed manufacturer's recommendations.

Except for short transition sections, flow in the range of 0.7 to 1.3 of the critical slope must be avoided unless the channel is straight. Velocities exceeding critical velocity shall be restricted to straight reaches.

Waterways or outlets with velocities exceeding critical velocity shall discharge into an energy dissipator to reduce discharge velocity to less than critical.

Side slope. The steepest permissible side slopes, horizontal to vertical, shall be:

Nonreinforced concrete:

Hand-placed, formed concrete

Height of lining, 1.5 ft or less Vertical Hand-placed screeded concrete or mortared in place flagstone

Height of lining, less that 2 ft I to I Height of lining, more than 2 ft2 to 1

Slip form concrete:

Height of lining, less than 3 ft1 to 1 Rock riprap2 to 1 Synthetic Turf Reinforcement Fabrics ... 2 to 1 Grid Pavers.....1 to 1

Cross section. The cross section shall be triangular, parabolic, or trapezoidal. Cross section made of monolithic concrete may be rectangular.

Freeboard. The minimum freeboard for lined waterways or outlets shall be 0.25 ft above design high water in areas where erosion-resistant vegetation cannot be grown adjacent to the paved or reinforced side slopes. No freeboard is required if vegetation can be grown and maintained.

Lining thickness. Minimum lining thickness shall be:

Concrete.....4 in. (In most problem areas, minimum thickness shall be 5 in, with welded wire fabric reinforcing.)

Rock riprap......Maximum stone size plus thickness of filter or bedding

Flagstone.....4 in., including mortar bed Synthetic Turf

Reinforcement Fabrics

and Grid Pavers......Manufacturer's Recommendations

Lining Durability. Use of non-reinforced concrete

or mortared flagstone linings shall be made only on low shrink-swell soils that are well drained or where subgrade drainage facilities are installed.

NRCS, CA June 2006

Related structures. Side inlets, drop structures, and energy dissipaters shall meet the hydraulic and structural requirements for the site.

<u>Outlets.</u> All lined waterways and outlets shall have a stable outlet with adequate capacity to prevent erosion and flooding damages.

Geotextiles. Geotextiles shall be used where appropriate as a separator between rock, flagstone, or concrete linings and soil to prevent migration of soil particles from the subgrade, through the lining material. Geotextiles shall be designed according to AASHTO M288, Section 7.3.

<u>Filters or bedding</u>. Filters or bedding shall be used where appropriate to prevent piping. Drains shall be used to reduce uplift pressure and to collect water, as required. Filters, bedding, and drains shall be designed according to NRCS standards. Weep holes may be used with drains if needed.

<u>Concrete</u>. Concrete used for lining shall be proportioned so that it is plastic enough for thorough consolidation and stiff enough to stay in place on side slopes. A dense durable product shall be required.

Specify a mix that can be certified as suitable to produce a minimum strength of 3,000 pounds per square inch. Cement used shall be Portland cement, Types I, II, or if required, Types IV or V. Aggregate shall have a maximum size of 1-1/2 inch.

Contraction joints. Contraction joints in concrete linings, if required, shall be formed transversely to a depth of about one-third the thickness of the lining at a uniform spacing in the range of 10 to 15 feet. Provide welded wire fabric or other uniform support to the joint to prevent unequal settlement.

Rock riprap of flagstone

Stone used for riprap shall be dense and hard enough to withstand exposure to air, water, freezing, and thawing. Flagstone shall be flat for ease of placement and have the strength to resist exposure and breaking.

Mortar

Mortar used for mortared in-place flagstone shall consist of a workable mix of cement, sand, and water with a water-cement ratio of not more than 6 gallons of water per bag of cement.

CONSIDERATIONS

Cultural resources need to be considered when planning this practice. Where appropriate, local cultural values need to be incorporated into practice design in a technically sound manner.

Consider adding widths of appropriate vegetation to the sides of the waterway for wildlife habitat.

Important wildlife habitat, such as woody cover or wetlands, should be avoided or protected if possible when siting the fined waterway. If trees and shrubs are incorporated, they should be retained or planted in the periphery of the grassed portion of the lined waterways so they do not interfere with hydraulic functions and roots do not damage the lined portion of the waterway. Mid- or tall bunch grasses and perennial forbs may also be planted along waterway margins to improve wildlife habitat. Waterways with these wildlife features are more beneficial when connecting other habitat types; e.g., riparian areas, wooded tracts and wetlands.

Provide livestock and vehicular crossings as necessary to prevent damage to the waterway. Crossing design shall not interfere with design flow capacity.

Establish filter strips on each side of the waterway to improve water quality.

When designing riprap linings and specifying rock gradations, consider that rock delivered to the site is often segregated by size or does not conform exactly to the specified gradation. Adequate safety factor should be incorporated.

Cultural Resources Considerations

NRCS's objective is to avoid any effect to cultural resources and protect them in their original location. Determine if installation of this practice will have any effect on any cultural resources.

Document any specific considerations for cultural resources in the design docket and the Practice Requirements worksheet.

GM 420, Part 401, the California Environmental Handbook and the California Environmental Assessment Worksheet provide guidance on how the NRCS must account for cultural resources. The Field Office Technical Guide, Section II contains general information, with Web sites for additional information.

NRCS, CA June 2006





Endangered Species Considerations

Determine if installation of this practice with any others proposed will have any effect on any federal or state listed Rare, Threatened or Endangered species of their habitat. NRCS's objective is to benefit these species and others of concern or at least not have any adverse effect on a listed species: If the Environmental Evaluation indicates the action may adversely affect a listed species which has been determined to be critical habitat, NRCS will advise the land user of the requirements of the Endangered Species Act and recommend alternative conservation treatments that avoid the adverse effects. Further assistance will be provided only if the landowner selects one of the alternative conservation treatments for installation; or at the request of the landowners, NRCS may initiate consultation with the Fish and Wildlife Service. National Marine Fisheries Service and/or California Department of Fish and Game. If the Environmental Evaluation indicates the action will not affect a listed species or result in adverse modification of critical habitat, consultation generally will not apply and usually would not be initiated. Document any special considerations for endangered species in the Practice Requirements Worksheet.

Water Quantity

- Effects upon components of the water budget, especially effects on volumes and rates of runoff, infiltration, evaporation transpiration, deep percolation, and ground water recharge.
- Variability of the practice's effect caused by seasonal and climatic changes.

Water Quality

- Filtering effects of vegetation on the movement of sediment and dissolved and sediment attached substances will be evaluated.
- Effects on the visual quality of the water resources.
- Short-term and construction effects on the quality of water resources.

PLANS AND SPECIFICATIONS

Plans and specifications for lined waterways or outlets shall be in keeping with this standard and shall describe the requirements for applying the practice to achieve its intended purpose(s).

NRCS, CA June 2006

OPERATION AND MAINTENANCE

An operation and maintenance plan shall be provided to and reviewed with the landowner. The plan shall include the following items and others as appropriate.

A maintenance program shall be established to maintain waterway capacity and outlet stability. Lining damaged by machinery or erosion must be repaired promptly.

Inspect lined waterways regularly, especially following heavy rains. Damaged areas shall be repaired immediately. Remove sediment deposits to maintain capacity of lined waterways.

Landowners should be advised to avoid areas where forbs have been established when applying herbicides. Avoid using waterways as turn-rows during tillage and cultivation operations. Prescribed burning and mowing may be appropriate to enhance wildlife values, but must be conducted to avoid peak nesting seasons and reduced winter cover. Control noxious weeds. Do not use as a field road. Avoid crossing with heavy equipment.

REFERENCES

National Engineering Handbook, Part 650, Engineering Field Handbook: Chapter 16, Streambank and Shoreline Protection.

Robinson, K.M., C.E. Rice, and K.C. Kadavy. 1998. Design of Rock Chutes. Transactions of ASAE, Vol. 41(3): 621-626.

NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE SPECIFICATION

468 - LINED WATERWAY OR OUTLET

I. SCOPE

The work shall consist of grading and shaping a waterway to the lines and grades as shown on the drawings, and includes furnishing and placing a lining of the type and thickness as specified.

II. MATERIALS

Concrete, when specified, will be placed in conformance with the requirements of Construction Specification #701 - Concrete.

Rock riprap, when specified, rock will be placed in conformance with the requirements of Construction Specification #707 - Rock riprap.

Other materials, when specified other materials will be placed in conformance with the requirements of Special Construction Specifications to be attached to the drawings.

Geotextile fabric, when specified will conform to the required of Construction Specification #705 - Geotextile Fabric.

III. SITE PREPARATION

The foundation area shall be cleared of all trees, stumps, roots, brush, boulders, sod, debris, and other objectionable materials. All topsoil shall be removed and stockpiled until the needed for spreading over areas requiring vegetative cover. Removal operations shall be done in such a manner as to avoid damage to other trees and property.

IV. FOUNDATION

To shape the required cross-section, excavation shall be to the lines and grades as shown on the drawings, or as staked in the field. Subgrade shall be firm and free of water. Any earthfill required to bring subgrade to grade, shall be placed in layers not exceeding 8-inches, and compacted to the same density as the adjacent undisturbed material.

V. PLACEMENT

Placement of the lining materials shall be conformance of the Construction Specification as shown on the Practice Requirement sheet, and as shown on the drawings.

VI. VEGETATIVE COVER

Unless otherwise specified, a protective cover of vegetation shall be established on the disturbed area. The planting of vegetative materials shall conform to the requirements of Practice Specification 342, Critical Area Planting.

VII. SPECIAL MEASURES

Measures and construction methods shall be incorporated as needed and practical that enhance fish and wildlife values. Special attention shall be given to protecting visual resources and maintaining key shade, food and den trees.

VIII. CONSTRUCTION OPERATIONS

Construction operations shall be done in such a manner that erosion and air and water pollution are minimized and held within legal limits. The owner, operator, Contractor or other persons will conduct all work and operations in accordance with proper safety codes for the type of construction being performed with due regards to the safety of all persons and property.

The completed job shall be workmanlike and present a good appearance.

OPRATION AND MAINTENACE ITEMS

A properly operated and maintained lined waterway or an outlet for excess water is an asset to your farm. This lined waterway was designed and installed to safely remove or discharge excess water from your farm. The estimated life span of this installation is at least 10 years. The life of this practice can be assured and usually increased by developing and carrying out a good operation and maintenance program.

CONSIDERATIONS

Water Quantity

- Effects upon components of the water budget, especially effects on volumes and rates of runoff, infiltration, evaporation transpiration, deep percolation, and ground water recharge.
- 2. Variability of the practice's effect caused by seasonal and climatic changes.

Water Quality

- Filtering effects of vegetation on the movement of sediment and dissolved and sediment attached substances will be evaluated.
- 2. Effects on the visual quality of the water resources.
- 3. Short-term and construction effects on the quality of water resources.

Endangered Species Considerations

Determine if installation of this practice with any others proposed will have any effect on any federal or state listed Rare, Threatened or Endangered species or their habitat. NRCS's objective is to benefit these species and others of concern or at least not have any adverse effect on a listed species. If the Environmental Evaluation indicates the action may adversely affect a listed species or result in adverse modification of habitat of listed species which has been determined to be critical habitat, NRCS will advise the land user of the requirements of the Endangered Species Act and recommend alternative conservation treatments that avoid the adverse effects. Further assistance will be provided only if the landowner selects one of the

alternative conservation treatments for installation; or at the request of the landowners, NRCS may initiate consultation with the Fish and Wildlife Service, National Marine Fisheries Service and/or California Department of Fish and Game. If the Environmental Evaluation indicates the action will not affect a listed species or result in adverse modification of critical habitat, consultation generally will not apply and usually would not be initiated. Document any special considerations for endangered species in the Practice Requirements Worksheet.

Some species are year-round residents in some streams. such as, freshwater shrimp. Other species, such as steelhead and salmon, utilize streams during various seasons. Be aware that critical periods, such as spawning, eggs in gravels, and rearing of young may preclude activities in the stream that may directly affect the stream habitat during those periods. For example there should be no disturbance of stream gravel beds that may have eggs in them. That could include any equipment in the stream or even walking in the stream or work upstream that may result in sediment depositing in the gravel beds. Document any special considerations for endangered species in the Practice Requirements Worksheet.

PLANS AND SPECIFICATIONS

Plans and specifications for constructing lined waterways or outlets shall be in keeping with this standard and shall describe the requirements for applying the practice to achieve its intended purposes.

Figure 1 to be provided by SCE.

OPERATION AND MAINTENANCE

Provisions must be made for timely maintenance to insure lined waterways function properly.

STATEMENT OF WORK Lined Waterway or Outlet (468)

These deliverables apply to this individual practice. For other planned practice deliverables refer to those specific Statements of Work.

DESIGN

Deliverables:

- 1. Design documents that demonstrate criteria in practice standard have been met and are compatible with planned and applied practices
 - a. Practice purpose(s) as identified in the conservation plan.
 - b. List of required permits to be obtained by the client
 - Compliance with NRCS national and state utility safety policy (NEM part 503-Safety, Section 503.00 through 503.22)
 - d. Practice standard criteria related computations and analyses to develop plans and specifications including but not limited to:
 - i. Hydrology/hydraulics
 - ii. Type of Liner
 - Outlet capacity and stability
- 2. Written plans and specifications including sketches and drawings shall be provided to the client that adequately describes the requirements to install the practice and obtain necessary permits.
- 3. Operation and maintenance plan
- 4. Certification that the design meets practice standard criteria and comply with applicable laws and regulations (NEM Subpart A, 505.03(b)(2))
- 5. Design modifications during installation as required

INSTALLATION

Deliverables

- 1. Pre-installation conference with client and contractor
- Verification that client has obtained required permits
 Staking and layout according to plans and specifications including applicable layout notes
- 4. Installation inspection
 - a. Actual materials used
 - b. Inspection records
- 5. Facilitate and implement required design modifications with client and original designer
- 6. Advise client/NRCS on compliance issues with all federal, state, tribal, and local laws, regulations and NRCS policies during installation
- 7. Certification that the installation process and materials meets design and permit requirements

CHECK OUT

Deliverables

- As-built documentation
 - a. Extent of practice units applied
 - b. Drawings
 - c. Final quantities
- 2. Certification that the installation meets NRCS standards and specifications and is in compliance with permits (NEM Subpart A, 505.03(c)(1))
- 3. Progress reporting

REFERENCES

- Field Office Technical Guide (eFOTG), Section IV, Conservation Practice Standard Lined Waterway or Outlet,
- National Engineering Manual, Utility Safety Policy
- NRCS National Environmental Compliance Handbook
- NRCS Cultural Resources Handbook

NRCS, CA August, 2004

UNITED STATES DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE

468 – LINED WATERWAY OR OUTLET OPERATION AND MAINTENANCE

Sponsor/Land user:			Date:		
Address:					
Location	GPS Coordinates	Map Datum:	E	N	
Quad Shee	et Name		SEC	T	R

A properly operated and maintained lined waterway or outlet is an asset to the farm. This lining facility was designed and installed to provide erosion protection for the waterway or outlet. The estimated life span of this installation is at least 10 years. The life of this installation can be assured and usually increased by developing and carrying out a good operation and maintenance program.

This practice will require you to perform periodic operation to maintain satisfactory performance. Here are some recommendations to help you develop a good operation and maintenance program:

GENERAL RECOMMENDATIONS

- Maintain adequate drainage of foundations.
- Maintain widths of soil berms or banks. Avoid use of tillage equipment that accelerates soil removal.
- Drain all lined waterways or outlets when not being used. Immediately repair any cracks or breaks in the lining, and if settlement is present, investigate cause before repair.
- If livestock are present, prevent their access to linings and provide other drinking water facilities.
- Remove any blockage (sediments, debris, foreign material etc.) that restrict flow capacity.
- Immediately repair any vandalism, vehicular or livestock damage.
- Inspect for damage from rodents or burrowing animals. Repair any damage. Take appropriate corrective actions to alleviate further damage.
- Remove woody vegetation and perennials from areas adjacent to lining,
- Repair spalls, cracks and weathered areas in concrete surfaces.
- Repair or replace rusted or damaged metal and paint and apply paint as a protective coating.
- Avoid crossings of equipment or vehicles except at designated areas.

NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION CONSTRUCTION SPECIFICATION

907 - ROCK RIPRAP

I. SCOPE

The work shall consist of furnishing and installing loose rock riprap at the locations and to the lines, grades, elevations, and cross-sections as shown on the drawings.

II. MATERIALS

Rock

Rock shall be sound, dense, and durable with a bulk specific gravity of not less than 2.5. Rock shall be angular to subrounded in shape with the greatest dimension not greater than 2 times the least dimension. The rock shall conform to the grading limits given below unless otherwise specified.

Size, Inches	Percent Passing
24	100
12	50
6	20
3	10

Filter or Bedding

When filter or bedding material is shown on the drawings, the material shall be composed of clean, hard and durable mineral particles free from organic matter, clay balls or other deleterious substances.

Bedding may be pit run material of sand, gravel, crushed stone or a mixture thereof.

Filter material shall conform to the gradation given in the Special Requirements listed on the "Practice Requirements" sheet.

III. SUBGRADE PREPARATION

The subgrade surfaces on which the riprap, bedding, filter, or geotextile is to be placed shall be cleared and graded prior to placement of bedding, geotextile, or rock.

When fill to subgrade lines is required, it shall consist of approved materials and shall conform to the requirements of appropriate sections of Conservation Construction Specification 903, Earthfill.

IV. PLACEMENT

Equipment Placed Rock Riprap

The riprap shall be constructed to the full course thickness in one operation and in such a manner as to avoid displacement of the underlying materials. The rock shall be delivered and placed in a manner that will insure that the riprap in place shall be reasonably homogeneous with the larger rocks uniformly distributed and firmly in contact one to another with the smaller rocks and spalls filling the voids between the larger rocks.

Riprap shall be placed in a manner to prevent damage to structures. Hand placing will be required to the extent necessary to prevent damage to the permanent works and to achieve the finished surface placement.

Hand Placed Riprap

Rocks shall be securely bedded firmly in contact one to another. Spaces between the larger rocks shall be filled with smaller rocks and spalls. Smaller rocks shall not be grouped as a for substitute larger rock. Flat slab rock shall be laid on edge.

Filter Layers or Bedding

When specified, the filter, bedding, or geotextile beneath the rock shall be placed on the prepared subgrade as specified in the Special Requirements listed on the "Practice Requirements" sheet. Compaction of filter layers or bedding will not be required, but the surface of such material shall be finished reasonably free of mounds, dips, or windrows.

NRCS, CA July 2005

232

Copy of Portion of HECO Plan for Fishback Property (Large Map Not Copied)

EXHIBIT 9 VENTURA COUNTY RESOURCE CONSERVATION DISTRICT (RCD) LETTER TO MR. WILLIAM STRATTON, MGR., EHD, August 12, 2006



Ventura County Resource Conservation District

P.O. Box 147 - 3380 Somis Road - Somis, California 93066 - Phone (805) 386-4685

Mr. William Stratton, Manager VC Environmental Health Department 800 South Victoria Avenue Ventura CA 93009-1600 August 12, 2006

Dear Mr. Stratton,

Your request for Ventura County Resource Conservation District's (VCRCD) response to the "brief" given at the Fishback Appeal hearing on July, 2006 is forwarded for your reference.

Mr. Fishback implies that the VCRCD "approved, permitted, cleared or concurred" with fill, grading or erosion control activities prior to June 2006. There is no documentation to this on file in our office or Board Minutes. The VCRCD does not issue permits but rather approves plans under the Ordinance. However, the practice, authority and public impression is that of a "permit" once the HECO Plan is approved by the Board.

Mr. Fishback contends that the Ordinance #3539, Article II, Section 2.011 "Exception" negates the requirement for a Board Approved Plan based on his ownership claim of 125 contiguous acres and the 10% clause. While this clause is still a part of the ordinance, the Board of Directors of the VCRCD has not been open to recognizing the "10% Exception" without engineering support from Professional Engineer's involvement in the activity, discussion with the Board and subsequent Board Approval.

VCRCD District Engineer, Dean, first became aware of Fishback activity in October 2005 when Mr. Fishback requested a meeting along with his Engineer, Mr. Phil Sherman. The grading, fill, and import of inert debris was presented along with California State Integrated Waste Management Documents and previous references to the NRCS and VCRCD. A November 2006 site visit was subsequently scheduled with Dale Dean, Phil Sherman P.E. and Keith Mashburn of Supervisor Mickels' Office. It was during this time period that e-mail traffic from various parties came through describing the Fishback property as an illegal dump site. The site visit did not substantiate the disposal of waste materials but rather that of inert construction materials. Soil and concrete were noted in the fill areas.

A HECO Application received from Mr. Fishback in November 2005, stated 40 acres of the 125 acres were to be improved. District Engineer, Dean, continued to research the issue making two site visits prior to the approval. The Fishback Application was approved by the Board in May 9, 2006. Engineering Documents were submitted by Phil Sherman P.E. and the HECO Plan was approved at the June 13, 2006 Board Meeting authorizing work on three new fill sites. Old fill sites were not addressed in the HECO Plan.

Dale Dean

VCRCD District Engineer

c. Gary Ball Robert Walker, Jr. Raymond Gutierrez EXHIBIT 10 VENTURA PUBLIC WORKS AGENCY, EERD MEMORANDUM TO WILLIAM STRATTON, EHD, August 21, 2006



County of Ventura Public Works Agency

MEMORANDUM

DATE:

August 21, 2006

TO:

William Stratton, Manager, County of Ventura, Environmental Health

Department (EHD)

PR

FROM:

Bruce Belluschi, Manager, County of Ventura, Environmental and

Energy Resources Division (EERD)

SUBJECT:

Response to Material Inaccuracies in Kate Neiswender (Neiswender) Brief

Dated July 17, 2006 regarding Wayne Fishback (Fishback) Hearing for Illegal

Dumping Activities

Thank you for allowing me the opportunity to review and submit comment regarding the brief from Kate Neiswender, attorney for Fishback, involving Fishback's impending hearing for the current Cease and Desist Order from the County of Ventura for illegal dumping in Simi Valley. In reading the brief, I see a number of inaccuracies involving EERD either directly or indirectly. I have submitted my comments below for each of the material inaccuracies in the brief as they may involve EERD.

On page 2, it is stated that "Fishback contacted...[EERD]...to ensure he was conforming to or exempt from all permitting requirements" with respect to Fishback's grading operations. This statement is materially inaccurate as EERD has never maintained any purview to issue permits of any kind, including grading permits, and therefore would <u>never</u> be in a position to provide any type of authoritative comment on any entity's conformance, or lack thereof, to any County-issued permit. Further, no such comment was ever made from an EERD staff member.

On page 4, Neiswender asserts that "Pandee Leachman at the Ventura County EERD told Fishback that the County is actively encouraging agricultural operations to utilize the type of clean fill for erosion control, specifically because it keeps such materials out of County landfills". Ms. Leachman has confirmed that she has <u>never</u> made such comments either to Fishback or to anyone else (see attached signed statement). Further, EERD has never maintained such ideologies owing to the inherent inaccuracy of such a statement; indeed, clean fill, when delivered to a landfill, is treated as a "beneficial use" material and therefore has no negative affect upon the County or the County's waste diversion rate.

In the first full paragraph on page 6, there is general discussion about the County meeting Ordinance goals related to waste diversion and Assembly Bill (AB) 939. It should be clearly noted here that the County of Ventura maintains franchise agreements with all solid waste haulers, or "collectors", authorized to provide legal hauling operations and perform solid waste diversion efforts within the unincorporated area (UA) of the County. Significantly, within each

of these agreements (Section 3.12), collectors <u>must</u> "deliver all Solid Waste that is to be disposed to a legally permitted disposal site and deliver all solid waste intended for diversion to a legally permitted processing site or destination". Property owned by Fishback is not legally permitted for receiving solid waste and therefore such property should, and would, never be considered as an appropriate or legal destination for solid waste within the County of Ventura.

On page 7, it is stated "Fishback had obtained clearances for the erosion control work from... EERD". This statement is completely false as EERD never has maintained any ability or authority to provide, or issue, clearances for erosion control.

On page 10, it is stated "The County of Ventura distributes flyers to encourage agricultural operations to utilize construction debris in erosion control work". This statement, if intended to involve or discuss EERD, is materially inaccurate as no such efforts have ever occurred. Moreover, the VCMAX website to which Neiswender earlier alludes, as shown within the documentation contained in Tab 16, clearly states "Neither VCMAX, the County of Ventura, nor any employee thereof is liable for any information...or representation regarding the materials offered through VCMAX". Furthermore, the current version of VCMAX states "VCMAX does not verify whether parties listing in VCMAX are in compliance with any rules, regulations and laws applicable to the listed materials". In short, VCMAX clearly puts the onus on the users of VCMAX to understand, and to comply with, all local laws and regulations and to maintain appropriate permits for all intended uses of materials gained through VCMAX; at no time within VCMAX has it ever been stated that large-scale dumping of inert solid waste to a non-permitted disposal site within Ventura County is encouraged or acceptable.

On page 11, it is stated "Ventura County ordinance (4308) exempts construction material of the exact type used in the Fishback Ranch erosion control project". As this section of the brief is so wholly inaccurate, convoluted and nonsensical, it is difficult to provide accurate comment other than to say that Ordinance 4308 does define inert material as solid waste (Section 4741-18). Specifically, as defined under Ordinance 4308, solid waste is "discarded wastes...whether or not these wastes are or may be designated for diversion". Further, the collection and transport of solid waste (including inert materials) from demolition or construction sites is not exempt from Ordinance 4308 either. Lastly, no language within either County Ordinance 4308 or on the "Director's List of Recyclables" page contained within Tab 16 provides for, or encourages, either the dumping, or large-scale receipt, of inert solid waste to a non-permitted disposal site within Ventura County.

Lastly, on page 18, reference is made to Section of 4740-3 of Ordinance 4308 and the ability of Ordinance 4258 to supersede Ordinance 4308. It is firmly the view of EERD that Section of 4740-3 of Ordinance 4308 clearly allows for EHD, as a regulatory entity, to assume full authority in all matters involving "criminal or civil liability or remedy provided in any other law or regulation applicable to Solid Waste, Solid Waste Handling and Solid Waste Facilities" and the "enforcement of laws and regulations affecting Solid Waste nor shall this Article preclude any other person from enforcing laws or regulations affecting solid waste to the extent permitted by law". Again, this section of Neiswender's brief is wholly inaccurate and misrepresented.

Thank you for the opportunity to provide comment on this important issue.









MEMORANDUM

DATE:

August 21, 2006

TO:

Bruce Belluschi, Manager, EERD

FROM:

Pandee Leachman, Environmental Resource Analyst II

SUBJECT:

Mr. Fishback's Assertions

I unequivocally DENY ever having stated in conversations with Mr. Fishback that "the County is actively encouraging agricultural operations to utilize...clean fill for erosion control, specifically because it keeps such materials out of County landfills", as attributed to me by Mr. Fishback with his legal brief dated July 17, 2006. There is absolutely no reason, given my staff level and assignments within the Division, that I would ever make such a definitive, over-arching policy statement. However, as County Coordinator of the Ventura County Materials Exchange program (VCMAX), I do promote the reuse of C&D inerts as well as other materials and presume VCMAX catalog users shall be aware of, and comply with, all local laws and regulations in the use of materials procured through the catalog.

I am happy to testify to these statements under oath if so desired.

Pardee leachman

EXHIBIT 11 VENTURA PUBLIC WORKS AGENCY,
DEVELOPMENT & INSPECTION SERVICES
DIVISION MEMORANDUM TO WILLIAM
STRATTON, EHD, August 25, 2006



County of Ventura Public Works Agency Engineering Services Department MEMORANDUM

Date:

August 25, 2006

To:

Bill Stratton

Environmental Health Division

From:

Raymond Gutierrez, Manager

Development & Inspection Services Division

Subject:

Public Works Agency Comments pertaining to Wayne Fishback's

Brief, Dated July 17, 2006

Mr. Fishback has approached Jim Myers and me on several occasions to discuss how he can be exempted from a grading permit. My recollection is that his primary discussions with our office were made after he had been receiving fill material on his property. He may have spoken with Mr. Myers at our public counter regarding grading permit exemptions, but no authorization was made by Jim Myers or me that he could grade without obtaining a grading permit or formal grading permit exemption. The public often asks our office to explain the exemptions and in many cases people can perform grading without a grading permit or formal exemption, but the work that Mr. Fishback has performed will need either: an approved HECO plan from the RCD (Resource Conservation District) that applies to all graded areas, an approved grading permit from the Public Works Agency, or an approved refuse disposal site controlled by other regulations and permitted by the Resource Management Agency.

In a letter dated May 10, 2005, Jim Myers informed Mr. and Mrs. Fishback that a violation of the Ventura County Building Code Section 3306.1 existed on APN 649-0-320-17 and 34. An identical letter on the same date was also mailed to the Evelyn Meltzer Trust for the same violation on APN 649-0-320-18, 19, 22, and 33. Mr. Fishback has informed our office that he controls these parcels.

Several meetings did occur with Mr. Fishback, the PWA (Jim Myers, myself, Jim O'Tousa), RCD's Dale Dean, Mr. Fishback's Engineer - Phil Sherman, and Supervisor Mikel's office (Keith Mashburn) at the County's Hall of Administration building after he had received the May 10^{the} letter. In an October 2005 meeting, Mr. Fishback stated to me that his intended use of the property is for agricultural purposes and I did personally inform Mr. Fishback at an October 2005 meeting that he stop bringing in the dirt until he had a grading permit and again restated

Page 2 of 2 August 25, 2006 PWA Comments

this to him in April 2006 until he had approved HECO plan in place. Since Mr. Fishback was placing fill material in a "highly erosive" soil zone as determined by the Hillside Erosion Control Ordinance, Mr. Fishback was told by me to contact the RCD (Resource Conservation District) and obtain a HECO in April 2006.

Normally by obtaining an approved HECO plan from the RCD, this act would qualify as a grading permit exemption. However, since the RCD's approved HECO plan for Mr. Fishback was limited in scope on undisturbed land and did not address any of the fill material previously placed Mr. Fishback, I recorded notices of grading non-compliances on July 5, 2006 on the following APNs: 649-0-320-17 and 34 and 649-0-320-18, 19, 22, and 33. Should the HECO not incorporate these filled/graded areas or Mr. Fishback not obtain a controlled refuse disposal site permit by RMA, the PWA will require a grading permit to abate the violation.

I have also discussed this matter with Ron Coons, the Public Works Agency Director. He will not make the determination that Mr. Fishback's grading work is in an isolated-self contained area since Mr. Fishback has performed grading work on adjacent properties that he does not own or control and my office has received complaints from the owners and local neighbors. Therefore the grading and fill work will not qualify for an agricultural grading exemption under Section 3306.2.1 of the Ventura Building Code. A site inspection will be necessary by my office to fully determine the extent of all the fill placed by Mr. Fishback and it is highly likely that a discretionary grading permit (Section 3305.1) will be required to abate the grading violation since fill may have been placed on steep terrain and slopes created may exceed 25 feet in height.

If you have any questions, please contact me at 654-2059.

rg

EXHIBIT 12 VENTURA PUBLIC WORKS AGENCY, ENGINEERING SERVICES RECORDATION OF NOTICES OF NON-COMPLIANCE

20060705-0142588 Pages: 2 Fees: \$0.00 07/05/2008 82:14:24 PM T20060057081 JL Ventura County Recorder Philips County Recorder

Recorded at request of and Return to Public Works Agency Development & Inspection Services A.P. #649-0-320-188, 649-0-320-198, 649-0-320-220, 649-0-320-330 UN 0757

NO TAX DUE

No Fee Required Pursuant to Government Code 27383

COUNTY OF VENTURA

NOTICE OF GRADING NON-COMPLIANCE

The County of Ventura, Public Works Agency, has determined that a Non-Compliance to the Ventura County Building Code exists on that certain real property described in the Deed recorded on January 20, 1998 as Document No. 980006827 of Official Records of Ventura County, wherein Evelyn Melizar, Trust is named as owners.

The grading performed on said real property violates the following provisions of the Building Code:

Ventura County Building Code (Appendix - Chapter 33 of the California Uniform Building Code)

All persons interested in the development of this property are hereby notified that the Grading Non-Compliance may preclude the issuance of Building Permits and other land use entitlements until measures satisfactory to the Ventura County Public Works Agency are taken to insure compliance with the Building Code.

No assumption should be made that the Grading Non-Compliance has been corrected until a Release of Grading Non-Compliance has been executed by the Public Works Agency on behalf of the County of Ventura and also recorded in the Ventura County Recorder's Office.

Pursuant to the provisions of the Building Code, the owners have been notified of this Grading Non-Compliance.

Inquiries concerning this Notice of Grading Non-Compliance should be directed to the County of Ventura, Development and Inspection Services Division, Public Works Agency, 800 South Victoria Avenue, Ventura, CA 93009.

Dated:

7/5/2006

Raymond Gutierrez, J

Manager

Development & Inspection Services

Public Works Agency

STATE OF CALIFORNIA COUNTY OF VENTURA

On this 5th day of March, in the year 2006, before me, Philip J. Schmit, County Clerk of the County of Ventura, State of California, personally appeared Raymond Gutierrez, Jr., is personally known to me to be the person who executed this instrument as a Manager of the Development and Inspection Services Division of the Public Works Agency of said County and State, and acknowledged to me that the County of Ventura executed it.



Philip J. Schmit County Clerk County of Ventura

> LaVonne Driver Deputy Clerk

> > 9/13/90

Recorded at request of and Return to Public Works Agency Development & Inspection Services A.P. #649-0-320-340 UN 0756

NO TAX DUE

No Fee Required Pursuant to Government Code 27383

COUNTY OF VENTURA

NOTICE OF GRADING NON-COMPLIANCE

The County of Ventura, Public Works Agency, has determined that a Non-Compliance to the Ventura County Building Code exists on that certain real property described in the Deed recorded on March 29, 2002 as Document No. 020076329 of Official Records of Ventura County, wherein Carol Fishback and Wayne B. Fishback are named as owners.

The grading performed on said real property violates the following provisions of the Building Code:

Ventura County Building Code (Appendix - Chapter 33 of the California Uniform Building Code)

All persons interested in the development of this property are hereby notified that the Grading Non-Compliance may preclude the issuance of Building Permits and other land use entitlements until measures satisfactory to the Ventura County Public Works Agency are taken to insure compliance with the Building Code.

No assumption should be made that the Grading Non-Compliance has been corrected until a Release of Grading Non-Compliance has been executed by the Public Works Agency on behalf of the County of Ventura and also recorded in the Ventura County Recorder's Office.

Pursuant to the provisions of the Building Code, the owners have been notified of this Grading Non-Compliance.

Inquiries concerning this Notice of Grading Non-Compliance should be directed to the County of Ventura, Development and Inspection Services Division, Public Works Agency, 800 South Victoria Avenue, Ventura, CA 93009.

7/5/2006

Dated:

Manager

Development & Inspection Services

Public Works Agency

STATE OF CALIFORNIA COUNTY OF VENTURA

On this 5th day of March, in the year 2006, before me, Philip J. Schmlt, County Clerk of the County of Ventura, State of California, personally appeared Raymond Gutierrez, Jr., is personally known to me to be the person who executed this instrument as a Manager of the Development and Inspection Services Division of the Public Works Agency of said County and State, and acknowledged to me that the County of Ventura executed it.



Philip J. Schmit County Clerk County of Ventura

> LaVonne Driver Deputy Clerk

mu Dive

9/13/90

Recorded at request of and Return to Public Works Agency Development & Inspection Services A.P. #649-0-320-170 UN 0756

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87/85/2006 02:13:45 PM
T20060657878 JL
Ventura County Recorder
Philip J. Schmit

NO TAX DUE

No Fee Required Pursuant to Government Code 27383

COUNTY OF VENTURA

NOTICE OF GRADING NON-COMPLIANCE

The County of Ventura, Public Works Agency, has determined that a Non-Compliance to the Ventura County Building Code exists on that certain real property described in the Deed recorded on May 21, 2002 as Document No. 020119836 of Official Records of Ventura County, wherein Carol Fishback and Wayne B. Fishback are named as owners.

The grading performed on said real property violates the following provisions of the Building Code:

Ventura County Building Code (Appendix - Chapter 33 of the California Uniform Building Code)

All persons interested in the development of this property are hereby notified that the Grading Non-Compliance may preclude the issuance of Building Permits and other land use entitlements until measures satisfactory to the Ventura County Public Works Agency are taken to insure compliance with the Building Code.

No assumption should be made that the Grading Non-Compliance has been corrected until a Release of Grading Non-Compliance has been executed by the Public Works Agency on behalf of the County of Ventura and also recorded in the Ventura County Recorder's Office.

Pursuant to the provisions of the Building Code, the owners have been notified of this Grading Non-Compliance.

Inquiries concerning this Notice of Grading Non-Compliance should be directed to the County of Ventura, Development and Inspection Services Division, Public Works Agency, 800 South Victoria Avenue, Ventura, CA 93009.

Dated:

7/5/2006

Raymond Gutierrez, J Manager

Development & Inspection Services

Public Works Agency

STATE OF CALIFORNIA COUNTY OF VENTURA

On this 5th day of March, in the year 2006, before me, Philip J. Schmit, County Clerk of the County of Ventura, State of California, personally appeared Raymond Gutierrez, Jr., is personally known to me to be the person who executed this instrument as a Manager of the Development and Inspection Services Division of the Public Works Agency of said County and State, and acknowledged to me that the County of Ventura executed it.



Philip J. Schmit County Clerk County of Ventura

LaVonne Driver Deputy Clerk

9/13/90

EXHIBIT 13 EMAIL INQUIRIES REGARDING CIWMB PUBLICATION # 433-03-053

Darrell Siegrist - RE: CIWMB PUBLICATION #433-03-053

From:

"Clavecilla, Lanny"

To:

"Darrell Siegrist"

Date:

07/25/2006 1:43 PM

Subje

Subject: RE: CIWMB PUBLICATION #433-03-053

CC:

"Campbell, Yating", "Zak, Aleta"

Dear Mr. Siegrist,

We have been unable to locate the publication requested based on the provided publication number. It does not match our database. However, we have located the following publication (http://www.ciwmb.ca.gov/Publications/GreenBuilding/43303023.doc), which includes a section that briefly defines "clean" construction and demolition material. On page 14 of this publication is the following statement:

"According to the demolition contractor, the labor for processing asphalt concrete into sized, "clean" material (that is, material acceptable at no charge at the EBI Aggregates facility) was considered standard demolition practice for inert materials in the Sacramento area."

Should you require further assistance, please contact me. In the meantime, if I receive any other information related to this request I will most certainly pass it on to you.

Lanny Clavecilla
California Integrated Waste Management Board
Office of Public Affairs
oclaveci@ciwmb.ca.gov
(916) 341-6302
(916) 319-7357 fax

From: Darrell Siegrist [mailto:Darrell.Siegrist@ventura.org]

Sent: Monday, July 24, 2006 2:50 PM

To: Clavecilla, Lanny

Subject: RE: CIWMB PUBLICATION #433-03-053

Hi Lanny!

My telephone is 805/648-9248, 805/654-2480 (FAX). The publication number was provided to the LEA and to the Hearing Officer by the appellant's legal counsel (via written brief) in an appeal of a Cease & Desist order issued by the LEA. The brief contends that CIWMB publication #433-03-053 defines what "clean" means in terms of inert solids for reuse.

Regards, Darrell

file://C:\Documents and Settings\siegrid\Local Settings\Temp\XPgrpwise\44C6201AVCI... 07/26/2006



>>> "Clavecilla, Lanny" <oclaveci@CIWMB.ca.gov> 07/24/2006 2:28 PM >>> Darrell, can you send me your phone number? We are still researching this. Can you give me any more leads as to where you heard this reference and might it refer to an LEA advisory? Thanks.

Lanny Clavecilla
California Integrated Waste Management Board
Office of Public Affairs
oclaveci@ciwmb.ca.gov
(916) 341-6302
(916) 319-7357 fax

From: Darrell Siegrist [mailto:Darrell.Siegrist@ventura.org]

Sent: Monday, July 24, 2006 2:18 PM To: Clavecilla, Lanny; Campbell, Yating

Subject: RE: CIWMB PUBLICATION #433-03-053

Hi Yating!

Yes, I am with the Ventura County LEA. Any luck with 433-03-053?

Regards, Darrell

>>> "Clavecilla, Lanny" <oclaveci@CIWMB.ca.gov> 07/24/2006 1:37 PM >>> I think he's with the county: http://portal.countyofventura.org/portal/page? pageid=33,1% dad=portal% schema=PORTAL

From: Campbell, Yating

Sent: Monday, July 24, 2006 12:53 PM

To: Darrell Siegrist **Cc:** Clavecilla, Lanny

Subject: RE: CIWMB PUBLICATION #433-03-053

Let me do some research and get back to you.

Yating

From: Darrell Siegrist [mailto:Darrell.Siegrist@ventura.org]

file://C:\Documents and Settings\siegrid\Local Settings\Temp\XPgrpwise\44C6201AVCI... 07/26/2006



Sent: Monday, July 24, 2006 12:14 PM
To: Campbell, Yating
Subject: CIWMB PUBLICATION #433-03-053

Hi Yating!

A hearing brief filed on behalf of the appellant in a solid waste enforcement case that the Ventura County LEA is pursuing references CIWMB publication 433-03-053. I cannot find this document on the CIWMB website, including the Publications Catalog, which claims to provide information about all of the CIWMB's available publications.

If CIWMB publication 433-03-053 exists, please send me a copy; if this is not a valid publication number, please let me know.

Thanks,

Darrell

Darrell Siegrist - CIWMB publication

From:

"Zak, Aleta"

To:

Date:

07/24/2006 2:49 PM Subject: CIWMB publication

CC:

"Clavecilla, Lanny"

Mr. Siegrist:

I have been searching our files for the publication number you gave, #433-03-053, and we have no record of any such number. According to our numbering system, it would have been published in 2003 and the primary subject would have been "buy recycled" or perhaps something to do with recycled-content products.

Do you have the title of this document? Maybe I can dig deeper if I have a little more information.

Aleta Zak Associate Editor, Office of Public Affairs, MS-6 California Integrated Waste Management Board 1001 | Street/P.O. Box 4025 (mailing address) Sacramento, CA 95812-4025 azak@ciwmb.ca.gov (916) 341-6308

Visit http://www.ciwmb.ca.gov to learn more about reducing waste.

EXHIBIT 14 CIWMB PUBLICATION #433-03-023
The Capitol East End Office Complex: A Case for Construction and Demolition Waste Diversion

The Capitol Area East End Office Complex: A Case for Construction and Demolition Waste Diversion

December 2003



Zero Waste-You Make It Happen!

STATE OF CALIFORNIA

Arnold Schwarzenegger Governor

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Publication #433-03-023

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Prepared as part of contract number IVVM-C9094 (total contract amount \$175,000, includes other services).

The California Integrated Weste Management Board (CIWMB) does not discriminate on the basis of disability in access to its programs. CIWMB publications are available in accessible formats upon request by calling the Public Affairs Office at (916) 341-6300. Persons with hearing impairments can reach the CIWMB through the California Relay Service, 1-800-735-2929.

The energy challenge facing California is real.

Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, Flex Your Power and visit www.consumerenergycenter.org/flex/index.html.



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Acknowledgments

This report was developed as part of an inter-agency agreement with the Department of General Services. A special thanks to the author, Rick Mueller, Energy Resource Specialist with the Department of General Services, for his diligence in researching this report.

An Overview of Construction and Demolition Waste Management

Introduction

The mainstream construction industry has been slow to adopt integrated waste management as a business opportunity. However, increasingly construction and demolition (C&D) waste diversion (that is, salvaging and recycling) is becoming a standard business practice for many construction companies. This change is often client-driven and/or a response to local government ordinances and building permit requirements that target the C&D waste stream. Against this background, there is growing interest among building professionals for establishing best practices for C&D waste diversion programs.

This report is divided into two broad sections. The first section examines the rationale for adopting high waste diversion goals in building and construction projects, including benefits related to resource conservation, conservation of space in landfills, lower waste management costs, and enhanced neighborhood preservation. The discussion also covers procedures for implementing waste management programs, which require coordination with standard construction activities. The second section features a waste management case study of a large office complex built in a metropolitan area of California. The case study is intended to serve as a reference for building professionals. While each construction project is unique, some of the lessons learned from the case study should be transferable to other large construction projects throughout the state.

Concerning the case study project, it is noteworthy that the high C&D diversion was accomplished with relatively little adaptive reuse, deconstruction activity, or labor-intensive source separation at the construction site. Furthermore, the builder had relatively little experience in managing high-diversion waste management programs. The project's high waste diversion achievement depended on the availability of a local recycling and waste-processing infrastructure, including a recycling facility capable of sorting and processing commingled demolition debris off-site.

Public Policy in California—50 Percent Waste Diversion Mandate

In the late 1980s, California lawmakers passed groundbreaking legislation that had a mandate to divert a substantial portion of the state's municipal solid waste from landfills. This law was enacted due to awareness about the need to conserve resources, to reduce environmental degradation caused by solid waste operations, and to address a shortage of permitted landfill capacity statewide. The Integrated Waste Management Act (Assembly Bill [AB] 939, Sher, Chapter 1095, Statutes of 1989, as amended [AB 939]) requires local governments to divert 50 percent of municipal waste going to landfills by the year 2000, a goal that has not yet been fully achieved by all the state's jurisdictions.

Subsequent legislation was passed to reinforce the statewide diversion goal. AB 75 (Strom-Martin, Chapter 764, Statutes of 1999) added new provisions to the Public Resources Code (PRC), mandating that State agencies, universities, community colleges, and designated State facilities develop Integrated Waste Management Plans and divert 50 percent of their solid waste by January 1, 2004. As part of the legal requirements, large State facilities are required to submit annual reports to the California Integrated Waste Management Board (CIWMB) that documents their facility's actual solid waste diversion.

Local Government Responses to Diversion Mandate

Driven by the need to comply with State's waste diversion mandate, some local governments are targeting single-source waste streams that offer high potential to divert waste. Construction and demolition waste (C&D) is one of these "priority" solid wastes. The regulatory approaches for increasing C&D waste diversion on the local level generally include C&D waste management ordinances and building permit requirements.

One of the most compelling reasons for targeting the C&D waste stream is that it represents a significant portion of the municipal solid waste stream in many California localities. A 1999 waste characterization study, prepared by the CIWMB, determined that C&D represents about 12 percent of all municipal solid waste generated. However, C&D waste generation varies significantly from year to year due to the cyclical nature of construction activity. The quantification of the C&D waste stream is best expressed as a range due to the volatility of the generation rates. Statistically, C&D waste generation ranges between 8–20 percent of the U.S. municipal solid waste stream. However, C&D generation rate can be much higher on a local or regional basis. During the recent building boom, some California jurisdictions measured (that is, through waste characterization studies) C&D waste generation is as high as 30 percent of their municipal solid waste stream.

Despite this statistic, California jurisdictions appear to be divided on the strategic value of regulating the C&D waste stream. Many local governments view the managing of this waste stream as an important element of their overall waste diversion program, while others avoid waste streams that have cyclical generation patterns. The later group is concerned that their overall municipal solid waste diversion rate would significantly decrease during years in which construction activity is below average, thus skewing the statistical norm for average years.

Decisions to target C&D wastes locally are supported by the fact that its individual waste types (cardboard, concrete, scrap wood, metal, etc.) are often served by a diverse recycling market in most urban centers. The CIWMB has recommended a C&D diversion goal between 50 to 75 percent for State construction projects that are accessible to C&D waste processors and recyclers. However, the recoverable portion of the C&D stream at any given building site will also depend on the nature of demolition and/or construction work.

For example, in the Sacramento region nearly all the concrete rubble from mass demolition activities of structures is routed to inert waste processors for crushing and recycling. Therefore the demolition of a steel-reinforced concrete parking garage would be expected to result in a high recycling rate from a mass demolition approach. On the other hand, the mass demolition of a typical "stick-built" apartment building would not necessarily yield a significant quantity of economically recoverable C&D waste materials, especially given the fact that waste volumes going to wood waste-to-energy facilities are generally in decline in California.

Local Ordinances and Permitting Requirements

Another reason some local jurisdictions are targeting C&D waste is that both its source and disposal points are relatively easy to monitor and regulate because the majority of C&D waste is disposed in the "self-haul" mode as a single source waste stream. C&D waste management goals and strategies can also be encouraged and/or mandated through the local building permit process. Since the construction industry is already subject to this local permitting process within an existing institutional framework, it is not difficult for regulators to introduce new permitting requirements for C&D waste management.



Alternatively, building permit departments may offer incentives (for example, expedited permitting, etc.) or impose disincentives to encourage builders to adopt aggressive diversion goals for construction projects and by using non-disposal C&D management strategies.

The County of Alameda, the City of San Jose, the County of Ventura, the City of Oakland, the City of Santa Monica, and the City of Sacramento are among the local jurisdictions that have adopted C&D waste recycling ordinances. For details on specific C&D ordinances, see the CIWMB Web site at www.ciwmb.ca.gov/ConDemo/.

Incentives

Local C&D waste diversion ordinances, building permit requirements, and business economics are the primary drivers for builders that elect to include high-diversion C&D waste management programs. Of course, the project-specific (internal) benefits derived from C&D waste management are distinct from the public policy justifications (that is, external and/or societal benefits) for diverting C&D wastes from landfills.

These project-specific benefits (which profit the building project's proponents) include cost avoidance of waste disposal tipping fees, reduction in waste handling costs (estimated at 2.4 hours per ton), generation of revenue from the sale of salvaged materials, and avoidance of trucking costs, especially where C&D materials are processed for reuse on-site.

Some of the most significant project-specific benefits of C&D management are non-economic in nature. For example, waste diversion efforts are often cited as mitigation measures related to environmental impacts of construction projects (California Environmental Quality Act). Deconstruction activities can also conserve historical buildings and heritage objects. As such, a project with high C&D waste diversion may be more likely to meet acceptance of planning advisory groups, which often influence key decisions integral to the local planning process.

Economics of C&D Waste Management

Unfortunately, the mainstream construction industry has been slow to view C&D waste management as a business opportunity. In fact, C&D waste management is often overlooked, even in large-scale construction projects. This oversight may occur because the decision-maker follows outdated conventional wisdom, which dictates that construction waste management is never cost-effective. In some cases, the additional work and time required for planning and coordinating a C&D waste management program may seem onerous to many contractors.

Nevertheless, more and more construction firms are finding that the decision to include C&D waste management is rewarded on their bottom line. (This is often a serendipity experience because for many firms the original motivation for including a waste management program may be compliance with a local C&D ordinance or a local permitting requirement.) The cost-effectiveness of C&D waste management is most evident once the construction company reaches the "top of the learning curve" and after the company has fully integrated waste management planning, economic analysis, and C&D waste specifications into the company's standard business procedures.

While many building projects would profit from targeted C&D waste management, the economics of managing C&D waste depends on a number of regional and project-specific factors. These variables include the following:

- General market conditions for C&D wastes.
- Access to local recycling markets.

- Types and volumes of C&D waste.
- Availability of on-site space for placing storage and/or processing waste.
- The pace of the project schedule.
- Relative haul distances to waste disposal/waste recycling facilities.
- Local landfill tipping fees.
- Ability to employ innovative or advanced waste management techniques.
- Ability to employ on-site processing of inert demolition materials for use as base and subbase

Project-Level Planning Considerations

A successful C&D program requires that the entire project team (that is, contractors, subcontractors, architects, waste haulers, and owners) commit to the program at an early stage. The project team should designate a C&D waste coordinator to spearhead the effort. The C&D coordinator must see that all efforts are orchestrated throughout all phases of construction and that the program is fully integrated at all management levels.

Normally the waste management procedures and requirements are discussed during the pre-bid and pre-construction kick-off meetings. Everyone on the project team must understand their respective roles and how these tasks must be coordinated to accomplish the waste management activities. Each player's responsibility needs to be clearly stated and explained. Participants should understand that they will be held accountable for failing to meet their responsibilities and contractual obligations. Recycling firms normally charge extra for processing contamination found in source-separated bins. Financial penalties are sometimes applied to subcontractors that fail to follow recycling guidelines to recover these additional costs.

Generally, the keys to successful C&D waste management are effective project planning, economic analysis, and program integration. Each step in the waste management process must be planned well in advance and coordinated with key steps in the building construction process. Table 1 on page 17 identifies most of the key decision points in the C&D waste management planning process and relates them to standard stages in the construction process.

The decision to set a C&D waste diversion goal should occur early in the project's conceptual design stage to allow for planning. The owners, the A&E firm, and other key project team members may propose targets during the preliminary cost estimating and/or programming stages. This linkage to the project's budget estimating process is appropriate because the decision to divert C&D waste has the potential to affect (hopefully improve) the project's bottom line. Sometimes the decision for establishing a high waste diversion goal supports an overarching environmental objective. For example, establishing a C&D diversion goal may help the project achieve a sustainable building rating status (for example, such as a LEED rating) or it may support mitigation of the project's environmental impacts under the California Environmental Quality Act. The decision point for this type of project-specific goal setting normally occurs very early in the project's conceptual design phase.

Economic Feasibility Study

An effective economic feasibility study for managing C&D waste (economic report) is based on an accurate waste generation study, which estimates the volume and types of waste that will be produced by scheduled demolition and construction activities. The final economic report is

normally performed when the project reaches the design development phase; however, preliminary review of waste management opportunities can occur earlier in conceptual design. This report should identify appropriate and cost-effective waste management strategies and match waste management approaches to project-specific factors. (See the Recycling vs. Disposal Economics Worksheet in Appendix A of this report, which is designed to assist the project team in evaluating C&D recycling options.)

The economic feasibility study should assess all the regional and site-specific variables discussed above. It should also consider management strategies that are best suited to each distinct phase of construction activity. For example, if the building is framed using light gauge steel studs, there may be substantial metal recycling opportunities in the framing stage of construction. The economic report should consider opportunities to reduce construction waste through source reduction and reuse. For example, can wood forming be reused for framing? Is there potential to relocate entire building structures from the construction site rather than demolish them?

Site-Specific Strategy

Each construction project presents a unique set of challenges. Often the barriers to C&D recycling can be overcome through program flexibility, ingenuity, and/or innovation. For example, space constraints at a construction site often impede source separation of recycling, due to the bin space needed to store multiple construction waste materials. In such cases, the project team may consider the option of commingling C&D wastes in a "one-bin system." However, this requires that the project is served by a materials recovery facility capable of separating the C&D waste off-site. Alternatively, they may decide to economize on space by rotating the recycling bins according to the schedule of certain construction activities or trades to recover the primary volume of segregated waste being generated by specific construction phases.

Solid Resources Management Plan

The project team should next develop a "solid resources management plan" (management plan) based on the project's C&D economic feasibility study. This planning step normally occurs after the final design is complete, often during the development of bid documents. An effective management plan should state the specific source reduction, reuse, and recycling goals based on the viable options identified in the economic feasibility study. The management plan will identify the targeted C&D waste types, detail the staged procedures and methods for managing the wastes, and identify the C&D material recycling, processing, and disposal facilities to which C&D materials will be delivered.

Bid Specification

The next planning step is the development of the bid specification. The bid package phase of construction occurs after the working drawings are complete. The solid waste management specification is the means by which the goals of the solid resources management plan are incorporated in the bid package. This step is very critical to the whole effort because it transforms the C&D waste management goals and guidelines into enforceable requirements (contractual language) to help ensure the project's diversion goals, procedures, and specifications are followed. Construction and waste management is not mentioned in the current version of CSI Master Format, however, the specification could fit in any number of places in Division 1, including the 01100 sections or the 01500 sections.

Recordkeeping and Monitoring

Effective project planning normally includes provisions for monitoring, quality control, and feedback. As such, the designated C&D waste coordinator should monitor the actual progress of

waste management activities during construction to verify that key players are coordinating their respective activities and meeting their responsibilities. For example, an audit of the weight tickets that are available from the project's recycling and disposal facilities should validate the waste contractor's reported generation and diversion numbers. The waste volume and weight documentation should be monitored to determine if the project is on track in meeting the established diversion goal. The C&D waste coordinator should also check recycling containers for contamination and to ensure that contractors are following all the provisions outlined in the solid resources management specifications. Some projects may require "tweaking" in mid-stream to remain on course.



East End Office Complex (Blocks 171–174) Construction and Demolition Waste Management Case Study

Introduction

As previously noted, each construction project presents a unique set of challenges for incorporating a C&D waste management component, especially when the project team has established waste management goals that result in high diversion rates for C&D materials in the range of 50–75 percent. The purpose of the case study is to document the incorporation of a high diversion waste management program in a large-scale construction project. As previously noted, the case study segment of the report provides a framework for evaluating the project-level waste management planning process and the program implementation in a setting that is typical for most large, metropolitan areas in California.

The C&D case study goal is to promote education about the benefits and application of the C&D waste management. The best indicators of success are ultimately the achievement of high C&D diversion goals and demonstrated cost-effectiveness of the waste management program.

Project Overview

The Capitol Area East End Office Complex Blocks 171–174 is the larger of two related State of California design-build office building projects funded through a Public Works Board revenue bond sale of \$372 million. The Capitol Area East End Complex consists of 1.47 million gross square feet of office space for use by the State departments of Education and Health Services.

Blocks 171-174 lies east and south of Capitol Park and is bounded by 15th street to the west, 17th Street to the east, L Street to the north, and N Street to the south.

The waste diversion goal for the Capitol Area East End Complex design-build projects was 75 percent for all construction and demolition materials. This aggressive waste diversion target was actually part of a broader State effort to incorporate numerous sustainable concepts related to building design, construction practices, energy performance, indoor air quality, and material specifications. The California Department of General Services (the client/ building owner) collaborated with an interagency "green team" which was formed to prepare sustainable goals and criteria that were included in the request for proposals for the design-build project. The "green team" included the California Energy Commission, the Department of Health Services, the Air Resources Board, and the California Integrated Waste Management Board.

The Blocks 171-174 project was selected as the focus of this study because it features substantial demolition work (primarily mass demolition) and limited C&D waste reduction, deconstruction, and material reuse. The project also had less space constraints compared to the smaller Block 225 project. This allowed for more source separation of C&D materials on-site—primarily asphalt, concrete, brick, and metals. Nevertheless, the majority of C&D materials are stored as commingled materials on-site and sent to an off-site materials recovery facility for separation and processing.

The site superintendent for the design-builder (Clark/Gruen) was assigned the recycling coordinator responsibility for the project. He coordinated activities between the C&D recycling contractors and the various individual trades and construction subcontractors. The recycling coordinator also monitored recycling bins for contamination. Subcontractors were made aware



that recyclers charged up to \$40 per hour labor for cleaning up contamination in source-separated bins, which provided an incentive to follow recycling requirements.

This case study references the project's C&D waste reporting data, which was developed by the design-builder. The case study tracks the waste generation and diversion through September 30, 2002. Since the project was substantially 95 percent complete during the time this report was prepared, it is possible to reach general conclusions about the C&D diversion efforts. The projected waste generation for the remainder of the project is not a significant amount and should not alter the fundamental conclusions of this report.

Benefits of Waste Reduction and Reuse

The project's adaptive reuse (salvage) efforts included the relocation of an eight-unit art deco apartment and 10 mature fan palms, which were replanted at Capitol Park. These efforts signaled that the building proponents cared about the preservation of the neighborhood's unique history and architectural character. Therefore, the salvage efforts probably helped abate the local resistance and controversy that typically occurs with many large construction projects

The project's diverted C&D waste during the year 2000 represented 30 percent of the total self-haul tonnage received at Kiefer landfill during that year and 3.2 percent of the City of Sacramento's total reported diverted tonnage. The total wood component that was diverted to a biomass facility amounts to the thermal energy contained in 525 barrels of # 1 or #2 fuel oil, which averages 140,000 BTUs per gallon.

The high diversion rate achieved by the project is not just the result of conventional recycling. While the majority of the activity involved mass demolition-type work, the demolition budget afforded some limited salvaging activities. For example, an eight-unit apartment building was relocated from the building site to a nearby location within the neighborhood. The building was cut in half, raised, and transported to its new location at the southwest corner of 17th and N Streets in Sacramento.

However, the primary motivation of this operation was to conserve a historically sensitive building rather than to meet waste diversion goals. In addition, 10 historic California fan palms were dug up from the construction site and replanted in Capitol Park, which is adjacent to the project site. Again, the primary driver for the decision was not waste diversion since mature fan palms have very high economic value and represent heritage trees worthy of preservation.

Clark/Gruen incorporated waste reduction measures in the construction of the outer wall to shore below-grade excavation. As an alternative to using plywood formwork with poured-in concrete, a sprayed-on cementious material was used (shotcrete). This design approach saved 45 tons of plywood (60,000 square feet) and \$60,000 in material costs. In addition, reuseable steel forms were used in the majority of the project's concrete forming operations, which greatly minimized plywood use overall.² Clark/Gruen also instituted a requirement to reduce product packaging, but documentation of the amount of waste material reduced is not available.

There was an effort to reduce the overall impact of demolition and construction over the project's building footprint covering four city blocks. For example, Clark/Gruen committed to salvaging existing structures, sponsoring adaptive reuse, diverting construction waste from landfills, preserving heritage trees, recycling building materials, incorporating environmentally preferable building materials, and providing storage and collection facilities for recyclable materials used by building occupants.

The project's waste management efforts conveyed a sense of civic responsibility and generated local public relations (non-monetary) benefits. For example, the project's various salvage efforts

signaled that the building proponents cared about the preservation of the neighborhood's unique history and architectural character. Therefore, the salvage efforts helped abate the local resistance and controversy that typically occurs with many large construction projects.

Waste Generation and Diversion Data

Tables 2-A, 2-B, and 2-C, starting on page 17, summarize waste generation, recycling, reuse, and disposal by material type for Blocks 171-174. The tables divide the C&D waste data into three distinct waste management phases: 1) deconstruction/reuse phase 2) mass demolition phase, and 3) construction phase. The waste conversion factors (for example, volume-to-tons) are generally based on studies that reflect average densities and moisture content of waste types. In reality, the waste conversion factors for many waste types range widely due to their variability. Some of the "yards-to-tons" conversion factors used to calculate the project's C&D numbers are taken from a 1991 solid waste characteristics study commissioned by the CIWMB.

However, conversion factors for asphalt concrete, brick, and metals were determined by averaging weight and volume information taken from project weight tickets. There is no conversion factor for mixed demolition because it is not a single material type; therefore it has very high potential variability. However, the waste management consultant for the project determined an average weight per ton of mixed demolition debris based on weight tickets and on-site verification. Only a portion of the C&D material generated at the project was sent to facilities with scales that provide tonnage data. Therefore, some estimates of the weight of C&D types are based on truck types and conversion factors.

The project's reuse activities occurred early in the demolition phase of the project (March-May 2000). The project's combined diverted tonnage that was recovered for reuse (as opposed to closed-loop recycling) is 460 tons. While it does not count toward the project's C&D diversion rate, it is noteworthy that the East End Project incorporated 30,000 square feet of gray marble recovered from the historic Library and Courts Building. The recovered marble was used in the ground floor lobbies of five new buildings.

The demolition phase of the project accounted for almost 70 percent of all the C&D waste generated by weight. Asphalt concrete was by far the dominant demolition waste material generated (70 percent of all demolition material by weight) due to the removal of a large area of surface parking and two blocks of city streets. Mixed demolition and brick accounted for most of the remaining demolition waste. The demolition phase lasted about seven months, from March to September 2000.

The construction phase of the project (through September of 2002) accounted for 30 percent of the project's waste by weight and is being generated over a much longer period of time compared to the demolition phase. This phase started in about October of 2000 (last reporting quarter of 2000) and is currently ongoing. Wood waste is the dominant construction waste type for the construction phase and represented about 32 percent of all construction waste generated by weight.

Pattern of Generation

There is a pattern in the generation of construction waste that mirrors the distinct stages of construction activity. This information is useful in planning C&D waste management activities, such as predicting the capacity of recycling bins needed for storing segregated waste during specific stages of construction. Cardboard, metals, plastics, and wood were generated every reporting quarter and generally increased as the project progresses to the interior finish stages. This is a predictable generation pattern because much of the material is roll-plastic used to protect finish surfaces. Also, plastic or cardboard packaging is used to protect finish construction

materials and plastic fencing is used for safety fence and to protect landscaping. Concrete construction waste generation peaked during the second quarter of 2001 and decreased dramatically after that date. Gypsum board generated from new construction was not reported until the last quarter of 2001 and increased dramatically by the second quarter of 2001.

Environmental Benefits From High Waste Diversion

A full discussion of the many avoided environmental impacts attributable to C&D waste diversion is beyond the scope of this report. However, among the environmental benefits are conservation of embodied energy, avoidance of leachate generation (water pollution), and avoidance of landfill gas (methane)—a gas that contributes, pound-per-pound, more significantly to global warming than CO₂ gas. It is noted that gypsum board (sheetrock) can also produce a toxic gas (hydrogen sulfide gas) under some conditions in disposal sites with wetter climates or higher moisture conditions.

One of the most directly measurable and significant of these benefits is conservation of landfill space.⁴ A total of 14,804 tons of C&D materials were generated during the demolition and construction activities (excluding excavated soil). The waste diverted from this project saved significant space for local landfills. The diverted tonnage (12,272 tons) is 14.5 percent of all the commercial tonnage (that is, 84,400 tons received from commercial waste haulers) sent to Kiefer landfill during the 2001–02 fiscal year.

The project's diverted tonnage is 31 percent of the total commercial self-haul tonnage sent to the same facility during the year 2000, the same year the project waste was generated (that is, 39,404 tons of waste received from business-related haulers at Kiefer landfill). Most C&D waste is typically disposed in the self-haul mode in California, with commercial waste haulers accounting for most of the remainder. An estimated 12,272 tons of C&D materials were conserved for recycling and/or biomass out of the project's total waste of 14,804 tons, representing an approximate 83 percent diversion rate.

The fuel value of the project's wood waste illustrates the energy conservation value of diverting wood waste to a biomass facility (11,257 cu yd). The embodied energy of wood waste is approximately 274,482 BTUs per cubic yard for a total of more than 3.09 billion BTUs of thermal energy conserved. This is the equivalent energy of 525 barrels of #1 or #2 fuel oil. This energy would have been lost if the material had been disposed in a landfill. (Kiefer landfill is the Sacramento County's largest landfill facility, which received a total of 526,800 tons of waste during fiscal year 2001–02).

Another benefit of recycling C&D materials is the avoidance of carbon loading into the atmosphere. Recycling normally reduces energy inputs in heavy industries (upstream) and results in dramatic cuts in greenhouse gas emissions (C0₂). For example, for each ton of steel scrap recovered in the project, there is a per-ton savings of 60 percent of the total energy input needed to produce steel from raw ore. Greenhouse gas emissions are reduced by 0.5 ton per ton of recycled steel produced compared to steel made from virgin ore.⁵

Other Benefits: LEED Points

The U.S. Green Building Council has developed a rating system for "sustainability" in design and construction known as Leadership in Energy and Environmental Design (LEED). The rating system is divided into six broad categories as follows: 1) Sustainable Sites, 2) Water Efficiency, 3) Energy and Atmosphere, 4) Materials and Resources, 5) Indoor Environmental Quality, and 6) Innovation and Design Process. The design builder is applying for LEED Silver certification for Blocks 171–174. Based on a review of LEED 2.1 for commercial buildings, the project will

earn two LEED points for demonstrating that 75 percent of their construction wastes were diverted through recycling and/or salvaging.

Other Potential Benefits: Compliance with Local Diversion Mandate

The City of Sacramento used the CIWMB's Adjustment Method to calculate its diversion rates from 1995 through 2000. This method uses the base-year generation amount (tons disposed + tons diverted) and changes in population and the economy to estimate the generation amount in each report year. The adjustment method yields an estimated report-year generation tonnage, which is then compared to an actual annual disposal tonnage reported by municipal solid waste facilities. Under this methodology, the East End Project's large diversion tonnage amount would not positively impact the city's diversion rate. In fact, in a system predicated on disposal tonnage, an increase in disposal, although a very small percentage of generation, would negatively impact the city's diversion rate. That said, the Board does allow jurisdictions to petition for disposal deductions in cases where the projects are completely out of their control.

Another diversion rate methodology that the city could choose is a generation-based calculation where diversion and disposal tonnage are tracked annually. That methodology could result in a new base year for the city. Under that scenario, both diversion and disposal could be quantified and may help a jurisdiction to increase its diversion rate.

The city is currently working to establish a new base year (2000, 2001, or 2002), which will measure diversion tonnage from throughout the city. Since the city has yet to complete this study and gain Board approval, it is difficult to know exactly how the East End Complex will impact the city's diversion rate. The city has filed an extension with CIWMB for the year 2000 in order to allow time for them to assess their diversion numbers based on this methodology.

According to City officials, the new waste diversion measurement study for the 2000 reporting year (that is, deadline for meeting the State's 50 percent diversion mandate) and for 2001 does not consider the East End Complex's C&D waste diversion. When using a generation-based calculation to establish a new base year, large increases in diversion or disposal activity associated with one-time events might be discounted, as they are not considered representative of normal diversion/disposal activity.

Based on the adjustment methodology, approximately 367,204 tons of material was diverted in 2000. The city's disposal tonnage was 452,022 tons for 2000, yielding a total estimated generation amount of 819,226 tons. Therefore, it would take roughly 8,192 tons of material to be shifted from disposal to diversion to increase the diversion 1 percent. The city's reported waste diversion for the year 2000 calculates about 1.1 points lower after deducting the project's (Blocks 171–174) C&D waste diversion for 2000.

Table 2-A indicates that the demolition phase of the project resulted in 9,108 tons of C&D materials diverted from March through September 2000—mostly asphalt concrete, mixed demolition and concrete/brick. An additional 254 tons of construction waste was diverted from October through December 2000. Therefore the total C&D diversion from the project for the year 2000 was 9,362 tons of C&D materials, excluding excavated soil.

All diversion measurement issues aside, the city can claim this type of activity as a diversion program occurring within its boundaries. Diversion programs conducted by materials generators throughout the city are essential in helping the city meet the goals of the Integrated Waste Management Act.

Economic Benefits

Comparing Costs of Waste Management Options

Most decisions in the building and construction world are driven by cost, in particular first cost over life-cycle cost. The case study offers some insights about the cost of implementing programs that set high waste diversion goals. Alternative waste management scenarios were developed to provide a basis for comparing the actual waste management cost data. The approach is to identify and compare cost indicators for each approach, including the East End Complex's (Blocks 171–174) model program. The waste management cost indicators are broken down by distinct elements, such as tipping fees, container fees, hauling costs, and waste handling/processing. This method assumes that the cost indicators would be factored into any competitive waste management bid for either demolition or construction waste activities.

Clark/Gruen (design/builder) hired two different contractors to perform the demolition and the construction waste management work. The waste management specifications required at least 75 percent diversion by weight of all C&D waste and required the contractors to document the recycling and disposal of materials (see Appendix B). Unfortunately, it is not possible to directly compare the actual contract costs of implementing the waste diversion programs to alternative bids that allow for higher disposal of C&D waste. The alternative waste management approaches were never actually bid for the project because the 75 percent diversion requirement was established early in conceptual design.

The project's separate waste management bids for demolition and construction waste do not break down into a meaningful schedule of values by waste management activities. The waste haulers charged a flat rate for each 30-yard semi end dump load of mixed demolition and green waste going across the scales. The flat rate charge includes tipping fees, labor costs, material handling, transportation charges, and bin rental.

The demolition and construction waste contractors were allowed to keep all the revenue generated from salvage activities. While Clark/Gruen did not receive the salvage revenue, it is assumed that the salvage value helped offset the costs of recycling demolition and construction waste. The waste contractors did not charge Clark/Gruen for transporting source-separated metals and brick taken to recycling facilities.

The waste management cost indicators are compared for three alternative waste management approaches: 1) the project's high waste diversion program (83 percent diversion), 2) a hypothetical 100 percent disposal scenario, and 3) a hypothetical low C&D waste diversion scenario. The study found that the most significant comparative costs are tipping fees, off-site material processing, and salvage revenue. Other cost indicators such as hauling charges, bin charges, and on-site material processing are not significantly different between the alternatives. Overall, the project's high waste diversion program cost \$83,904 less than the 100 percent disposal scenario (Table 3) and \$27,320 less than the more realistic low diversion scenario (Table 4). Salvage value generated for the high diversion alternative was \$10,270 compared to \$2,062 for the low diversion scenario and \$0.00 for the 100 percent disposal alternative.

The costs of moving the apartment and the live palms were not factored into the cost comparisons because the decisions to conserve these heritage objects were not driven by economic considerations. Also the costs for moving the apartment were not paid for by the design/builder and came from separate State funding. For information purposes, the total cost of relocating the live palms was \$110,000.

Tipping Fees and Disposal Surcharges

The flat rate disposal charge at L&D landfill was the baseline for factoring tipping fees to determine the theoretical cost of 100 percent waste disposal. The flat rate charge was \$300 per 30-cubic yard end dump load. There was an additional \$4 per truckload waste surcharge, which does not apply to the recycling facilities. The L&D landfill facility accepts most types of C&D waste materials and has competitive disposal rates (compared to Kiefer landfill). The L&D flat disposal rate has not changed since 1997.

The tipping fees and salvage revenues for two opposite waste management scenarios are listed in Table 2-C and in Table 3. These charts reveal a potential cost savings of \$83,904 (tipping fees, transportation, and handling charges) for high waste diversion as compared to the 100 percent disposal alternative. The estimated cost of tipping fees for the 100 percent disposal scenario is \$218,314. In contrast, the Blocks 171–174 project high diversion scenario had a net cost of \$134,410.

Tables 2 and 3 reveal the estimated costs of tipping fees between two opposite waste management approaches (that is, high diversion vs. 100 percent disposal). However, in the real world a 100 percent disposal scenario would be unlikely. Table 4 reflects a more realistic cost based on "conventional" waste management practices. This low diversion scenario (Table 4) adjusts some of the numbers shown in the 100 percent disposal scenario (Table 3). First, the segregated metals were "backed out" of the estimated total disposal costs on the basis that materials having relatively high salvage value (segregated metals) would probably not reach a landfill. By the same token, heavy inert materials (for example, concrete, asphalt concrete, etc.) are normally not disposed in solid waste facilities in the Sacramento region given that a viable inert material recycling/processing infrastructure is available in West Sacramento. Inert material recycling is generally far more cost-effective than the disposal alternative. Brick recycling is considered a marginal recycling activity due to its labor-intensive requirements and therefore was not backed out of the disposal calculations.

^{*} Seventy-five semi end dump loads of mixed demolition waste (975 tons of commingled demolition waste) were sent to L&D disposal facility. The local solid waste enforcement agency sorted out permit issues at the recycling facility that received mixed demolition waste from the project. Based on the design-builder's field verification studies performed at the Florin Perkins recycling facility, about 83 percent of the mixed demolition waste was recycled. Therefore an additional 809 tons of material potentially could have been diverted from waste disposal, either through recycling processes or used for fuel at a biomass facility (that is, wood waste). This scenario would have resulted in an overall 88 percent total diversion rate and an additional \$4,800 in cost savings for the project (that is, \$4,800 in cost savings in comparison to the 100 percent disposal scenario).

[†] An exception to this "standard practice" for asphalt concrete may occur when a demolition contractor is able to locate a fill site that will accept larger pieces of inert waste material, which is often commingled with dirt, steel, and other contamination. In such cases, the demolition contractor can often eliminate much of the labor of material preparation (as well as tipping fees), such as cleaning and sizing. However, according to the project's demolition contractor, there were no available fill sites accepting unprocessed asphalt concrete, brick, and other inert materials during the demolition project.

Self-Hauling Costs

The demolition and construction waste contractors performed their own hauling (self-hauling) rather than use large commercial waste haulers. While the transportation charges were not itemized separately, the hauling requirements for the project do not indicate higher transportation costs for the high waste diversion approach compared to the alternative scenarios. Based on discussions with the waste contractors, it appears that roughly the same number of trips (30 cubic yard semi end dump loads) would have been required for transporting materials for recycling as opposed to transporting material for disposal.

Haul distances for all of the recycling and disposal sites are within about 10 miles of the building site or less. In fact, the aggregate waste processor (EBI Aggregates) is actually closer to the building site than L&D landfill, the baseline disposal facility. This should have actually reduced the hourly hauling rate slightly for the high waste diversion scenario. The mixed demolition waste, green waste, brick recycling, and most metal recycling activities were performed at a recycling facility that is about the same distance from the building site as the baseline disposal site (L&D landfill). All of the new construction waste (beginning in October 2000) is stored in the same manner as "waste" C&D materials and is sent to Florin Perkins recycling facility as mixed demolition.

Container Fees

While the bin rental charges were not itemized separately, the bin rental requirements do not indicate higher costs for the high diversion waste management program compared to high waste disposal alternatives. This is because nearly all the recyclable construction materials are stored on-site as commingled waste (mixed demolition) for off-site processing. The technique of commingling mixed demolition materials on-site eliminates the need to store source-separated recyclable materials on-site. Therefore no additional bins are needed for the high diversion program as compared to the other disposal alternatives. The commingled recyclable materials are removed from the building site at about the same rate as disposed materials (about two bins per day). The only significant source-separated material type reported for the project was asphalt concrete. Standard demolition practice does not normally involve bin storage of asphalt concrete during demolition activities.

On-Site Waste Handling and Processing Costs

The on-site waste handling charges were not itemized separately (for example, separation, processing, loading at the construction site). However, this activity does not indicate significantly higher labor costs for the high waste diversion scenario. The largest portion of the demolition work was mass demolition, which generally did not involve source-separation or waste processing at the construction site.

The primary exception to this rule was the source-separated asphalt concrete. Except for asphalt concrete, the majority of materials were transported off-site as mixed demolition and green waste. While asphalt concrete was by far the project's dominant C&D waste material generated, the minimal processing requirements did not result in higher costs. According to the demolition contractor, the labor for processing asphalt concrete into sized, "clean" material (that is, material acceptable at no charge at the EBI Aggregates facility) was considered standard demolition practice for inert materials in the Sacramento area. This activity involves reduction of asphalt pavement into 2 by 2-ft pieces to consolidate and balance the load.

Similarly, on-site metal processing activities do not indicate significantly higher costs for recycling. There were only about 83 tons of source-separated metals processed at the construction site, representing only about 12 percent of all the generated metal. The costs for preparing the

source-separated metals for recycling is considered to be minimal because the recycling facility classified the metal as "unprepared."

This means that metal pieces were sized larger than 4 ft by 18 in. The lack of sizing indicates that the demolition contractor probably invested relatively little time in preparing the material for recycling. Also, based on the high price paid for salvage, the metal segregated on-site appears to have been heavy gauge steel (that is, thicker than one-quarter in.) such as structural beams. This material is generally much easier to sort and handle than light-gauge steel scrap.

Off-Site Sorting, Handling, and Processing

Off-site sorting and processing activities (that is, activities needed to prepare the project's mixed demolition waste for recycling) were far more labor-intensive compared to the disposal alternative. However, the labor costs for recycling were included in the "tipping fee" for mixed demolition, which ranged from \$240 to \$250 per each semi end dump load (30 cubic yard capacity) received at Florin Perkins recycling facility. This tipping fee was \$54 to \$64 less per load than the flat rate disposal charge (tipping fee) at L&D landfill (that is, the baseline disposal alternative).

Salvage Revenue

The added labor costs for processing recyclable materials such as metals, wood, gypsum, and brick were partially offset by the recycling revenue generated. For example, an estimated 611 tons of metals were recovered from the project's mixed demolition debris at Florin Perkins recycling facility. The salvaged metals were baled at Florin Perkins and sent to Schnitzer steel for shipment to steel smelters. The estimated price paid for this salvage was \$12-15 per ton.‡

Unprepared metal exceeding one-quarter-inch thick is worth substantially more than lighter-gauge metal scrap. The average salvage value paid for the segregated metal (unprepared metal source-separated at the construction site) taken to Sims Metal was \$25 per net ton. The total estimated salvage value for all metals was \$10,270.

Gypsum board from new construction (349 tons to date) was separated off-site and sent to a Sacramento-based agricultural facility for use as composting mix and soil amendment. Florin Perkins did not reveal any details about their gypsum board recycling program. However, the recycling of gypsum board was not a revenue generating activity for the construction waste contractor. The local gypsum board processor reports that they currently charge a tipping fee of \$18 per ton for accepting this material. The face paper from the wallboard is returned to the client after processing. This waste paper is sometimes used as alternative daily landfill cover.

The waste composition reports reveal that 706 tons of brick were recovered from mixed demolition materials. Clean, used brick retails for about \$400 per ton in the Sacramento region (\$500 per pallet weighing about 2,500 lbs). While the potential retail value of the recovered brick from the project appears to be high (\$282,400), the cost of recovering and cleaning brick is considered a marginal business activity.

[‡] The estimated salvage was based on cost information provided by Schnitzer steel. Florin Perkins Recycling was not able to provide actual salvage value information. Salvage steel prices depend on sizing, average thickness, and market conditions.

Lessons Learned

- Clark/Gruen (the design-builder) was initially concerned that the high diversion requirement
 would be a cost burden to the project. However, this concern is no longer an issue.⁷ As noted
 in the discussion above, there is evidence that the waste diversion program improved the
 project's bottom line.
- The well-developed recycling infrastructure in the Sacramento region was critical to the C&D program's success (that is, high diversion rate and lower costs). In particular, Clark/Gruen gives credit to their association with Florin Perkins Recycling, the contractor that processed the project's mixed demolition waste. The contractor's experience in C&D recycling probably reduced the need for program management and oversight.
- The project's waste diversion goal of 75 percent was established without the benefit of a waste composition study and an economic feasibility study. However, it is more logical to establish the waste diversion goal after a review of the economic feasibility study and full evaluation of alternative waste management opportunities. This is because the costs of high waste diversion programs often depend on a number of regional and project-specific factors. (Normally, the economic feasibility study should be available for review early in the design development phase of the project to allow time for incorporation in the project's bid documents.) This approach would allow for maximum targeting and refinement of waste management opportunities.
- The project's solid resources management plan does not reflect the comprehensive level of planning described in the previous section. For example, the plan did not identify potential permitting problems at Florin Perkins recycling facility, which resulted in the disposal of potentially recyclable material. It does not describe the project's source reduction, reuse, and deconstruction efforts. In particular, an effective deconstruction process must include sufficient time to avoid the mass demolition scenario.
- There is some evidence that the project might have benefited from more reliance on deconstruction as opposed to mass demolition. A higher level of deconstruction was not limited by on-site space constraints and may have enhanced the project's overall diversion rate without increasing project costs. There is little evidence that the opportunity was seriously evaluated in the early planning phase of the project. According to the demolition consultant's final report, there were opportunities through deconstruction to recover large amounts of wood materials, including whole roof truss systems and reusable redwood. However, architectural salvage and used building material recovery was more limited because the building landlords had already removed reusable materials, such as fixtures and hardwood flooring for use in other surrounding properties.
- The design builder used different consultants to track and report on the project's waste
 generation, reuse, recycling, and disposal numbers for the project's separate demolition and
 construction waste management phases. This may have resulted in some degradation of C&D
 data. For example, the waste classifications reported were sometimes inconsistent, depending
 on which consultant was reporting. The use of a single consultant may have eliminated this
 problem.

Table 1—Decision Points for C&D Project Management

Project Phase	C&D Waste Management Tasks
Feasibility study of concept	Establish C&D waste diversion goal (50–75 percent goal recommended for most projects).
Budget development/programming	Preliminary economic evaluation of C&D management opportunities.
Preliminary or schematic design	
Value engineering/design development	Commission complete C&D waste management economic feasibility study.
Working drawings	
Prepare bid package	 Develop integrated waste management plan. Incorporate C&D specifications. Pre-bid meetings.
Demolition ·	 Assign project waste coordinator. Hold meetings with demolition contractors.
Construction	Project waste coordinator performs coordination and feedback role, including continuous monitoring and outreach to contractors and subcontractors.
Building close-out	Project waste coordinator summarizes and documents the results of C&D waste management effort as may be required to qualify for LEED rating, etc.

Table 2a—Reused Waste (Demolition Phase From March—September 2000)

Type	Percent Diverted	Yards Generated	Yards/Ton Conversion	Tons Generated	Diverted Tons	Disposed Tons
Apartment (relocated)	100%	488	0.43	210	210	0
Live palms (relocated)	100%	463	0.54	250	250	0
Asphalt/concrete	100%	4,624	1.57	7,260	7,260	0
Wood/palettes (mixed demo)	100%	<311> Included in mixed demo	0.13	<40> Included in mixed demo	<40>	0
Wood sent to FP (segregated)	100%	30	0.13	4	4	0
Green waste sent to FP (segregated)	100%	510	0.21	107	107	0
Palm tree trunks (segregated)	100%	18	0.54	10	10	
Plywood/OSB	N/A	N/A	0.39	N/A	N/A	N/A

Type	Percent Diverted	Yards Generated	Yards/Ton Conversion	Tons Generated	Diverted Tons	Disposed Tons
Cardboard (included in mixed demo)	100%	<20>	0.24	<5>	<5>	0
Metals (segregated on building site)	100%	332	0.25	83	83	0
Metal (included in mixed demo)	100%	<84>	0.25	<21>	<21>	
Carpet/pad	N/A	N/A	0.40	N/A	N/A	N/A
Paint	N/A	N/A	0.70	N/A	N/A	N/A
Gypsum board	N/A	N/A	0.20	N/A	N/A	N/A
Insulation	N/A	N/A	0.01	N/A	N/A	N/A
Plastics (included in mixed demo)	100%	<36>	0.02	<1>	<1>	0
Beverage container	N/A	N/A	N/A	N/A	N/A	N/A
Red Brick (segregated)	75%	166	1.51	251	188	63
Concrete/brick (included in mixed demo)	75%	<623>	1.51	<941>	<706>	<235>
Mixed demo to Florin Perkins Recycling	84%	2,790	0.43	1200	996	204
Mixed demo to L&D disposal	0%	2,250	0.43	967	0	967
Subtotal	88%	11,671		10,342	9,108	1,234

Segregated Loads:

- 484 loads of concrete and asphalt taken to EBI at zero cost.
- 11 loads segregated metal to Sims Metal at \$25 per net ton paid for salvage value.
- 25 loads segregated red brick to Florin Perkins at zero cost.
- I load segregated wood waste taken to Florin Perkins at \$150 per load; 17 loads of segregated green waste taken to Florin Perkins at \$150 per load.
- 1 load of palm trunks taken to Florin Perkins at \$90 per load.
- 93 loads of mixed demo waste taken to Florin Perkins recycling facility at \$240 per load.
- 75 loads of mixed demo waste taken to L&D disposal site at \$304 per load.
- Subtotal tipping fees: \$47,910.
- Subtotal of estimated revenue from metal salvaging activities: \$2,600.

Table 2b—Waste Composition Table for Construction Phase (October 2000–September 2002)

Туре	Percent Diverted	Yards Generated	Yards/Ton Conversion	Tons Generated	Diverted Tons	Disposed Tons
Asphalt/concrete	100%	0	1.57	0	0	0
Wood/palettes (included in mixed demo)	100%	10,946	0.13	1,423	1,423	0
Green waste	100%	0	0.02	0	0	
Plywood/OSB	N/A	N/A	0.39	N/A	N/A	N/A
Cardboard (included in mixed demo)	100%	1,066	0.24	256	256	0
Metals (included in mixed demo)	100%	2,360	0.25	590	590	0
Carpet/pad	N/A	N/A	0.40	N/A	N/A	N/A
Paint	N/A	N/A	0.70	N/A	N/A	N/A
Gypsum board (included in mixed demo)	100%	1,745	0.20	349	349	0
Insulation	N/A	N/A	0.01	N/A	N/A	N/A
Plastics (included in mixed demo)	100%	10,100	0.02	202	202	0
Beverage containers	N/A	N/A	0.02	N/A	N/A	N/A
Concrete/brick (included in mixed demo)	75%	304	1.51	459	344	115
Mixed demo (after sorting)		2,360	0.43	1,183	0	1,183
Subtotal	71%	10,377	0.43	4,462	3,164	1,298

- Volume for all materials is based on averaged weight of mixed demo = 0.43 yards per ton.
- There were no segregated loads reported for construction phase.
- During the construction phase, a total of 346 loads of mixed demo waste was taken to Florin Perkins recycling facility at \$250 per load.
- Subtotal of tipping fees: \$86,500.
- Estimated gross revenue from metal recycling: \$7,670.
- 590 tons salvaged metal times \$13 per ton for unprepared scrap metal recovered at Florin Perkins and delivered baled to Schnitzer steel.

Table 2c—Waste Composition for Combined Construction and Demolition (March 2000–September 2002)

Туре	Percent Diverted	Yards Generated	Yards/Ton Conversion	Tons Generated	Diverted Tons	Disposed Tons
Apartment (relocated)	100%	488	0.43	210	210	0
Live palms (relocated)	100%	463	0.54	250	250	0
Asphalt/concrete	100%	4,624	1.57	7,260	7,260	0
Wood/palettes (included in mixed demo)	100%	<11,257>	0.13	<1,463>	<1,463>	D
Wood (segregated)	100%	30	0.13	4	4	0
Green waste (segregated)	100%	510	0.02	107	107	0
Palm tree trunks (segregated)	100%	18	0.54	10	10	
Plywood/OSB	N/A	N/A	0.39	N/A	N/A	N/A
Cardboard (included in mixed demo)	100%	<1,086>	0.24	<261>	<261>	0
Metals (segregated)	100%	332	0.25	83	83	0
Metals (included in mixed demo)	100%	<2,444>	0.25	<611>	<611>	0
Carpet/pad	N/A	N/A	0.40	N/A	N/A	N/A
Paint	N/A	N/A	0.70	N/A	N/A	N/A
Gypsum board (included in mixed demo)	100%	<1,745>	0.20	<349>	<349>	0
Insulation	N/A	N/A	0.01	N/A	N/A	N/A
Plastics (included in mixed demo)	100%	<10,136>	0.02	<203>	<203>	0
Beverage containers	N/A	N/A	0.02	N/A	N/A	N/A
Concrete/brick (segregated)	75%	166	1.51	251	188	63
Concrete/brick (included in mixed demo)	75%	<927>	1.51	<1,400>	<1,050>	<350>
Mixed demo		15,417	0.43	6,629	4,160	2,469
Totals	83%	22,048		14,804	12,272	2,532

- Volume numbers for mixed demo are based on 0.43 yards/tons conversion, which is the averaged weight for the project's commingled C&D materials.
- Combined tipping fees for demolition and construction programs: \$134,410.
- Estimated salvage value of recycled metals: \$10,270.

Table 3—Projected Cost of 100 Percent Disposal Scenario for Blocks 171-174

Туре	Facility	Number of Loads	Disposal Surcharge	Total Cubic Yards	Charge by Material Type	Total Charge by Material Type	Percent Diverted From Landfill
Apartment	L&D	38	\$152	488	\$4,880	\$5,032	0%
Asphalt/ concrete	L&D	484	\$1,936	4,624	\$46,240	\$48,176	0%
Segregated wood	L&D	1	\$4	30	\$300	\$304	0%
Green waste (segregated)	L&D	17	\$68	510	\$2,550	\$2,618	0%
Palm tree Trunks	L&D	1	\$4	18	\$180	\$184	0%
Metals (segregated)	L&D	1 1	\$44	332	\$3,332	\$3,376	0%
Concrete/ brick (segregated)	L&D	25	\$100	166	\$1,660	\$1,760	0%
Mixed demolition	L&D	516	\$2,064	15,417	\$154,170	\$156,864	0%
Totals		1,093	\$4,372	21,585	\$213,312	\$218,314	0%

- Disposal surcharge: \$4.00 per load.
- Charge by material type: \$10 per cubic yard (flat rate).
- Mixed demo charges are based on estimated 516 loads at \$304 per semi end dump load.
- Green waste charges are based on 17 loads at \$154 per semi end dump load.

Table 4—Projected Cost of Conventional Waste Management Approach (High Disposal) for Blocks 171–174

Туре	Facility	Number of Loads	Disposal; Surcharge	Total Cubic Yards	Charge by Material Type	Total Charge by Material Type	Percent Diverted from Landfill
AC	EBI	484	N/A	4,624	\$0	\$0	100%
Segregated wood	L&D	1	\$4	30	\$300	\$304	0%
Green waste (segregated)	L&D	17	\$68	510	\$2,550	\$2,618	0%
Palm tree Trunks	L&D	1	\$4	18	\$180	\$184	0%
Metals (segregated)	Sims metal	11	N/A	332		<\$2,062>	100%
Concrete and brick (segregated)	L&D	25	\$100	166	\$1,660	\$1,760	0%
Mixed demolition	L&D	516	\$2,064	15,417	\$154,170	\$156,864	0%
Totals		1,055	\$2,240	21,097	\$158,860	\$161,730	

- Disposal surcharge: \$4 per load.
- Charge by material type: \$10 per cubic yard (flat rate).
- Mixed demo charges are based on estimated 516 loads at \$304 per semi end dump load;
 green waste charges are based on 17 loads at \$154 per semi end dump load.
- Segregated metal estimated salvage value I =\$2,062.

Appendix A: Hard Copy of Economic Worksheet

Introduction

Would you like to recycle debris from your construction or demolition (C&D) project, but you don't know if it will save money or cost money? The economics of recycling on a project depends on many variables, including proximity of recyclers and landfills, wages, hauling costs, and the current economic value of the materials.

This worksheet. This worksheet can help you determine if recycling will save money on your project. The instructions are on page 1 and the worksheet is on pages 2 and 3.

Project size. This worksheet is most appropriate for residential and small commercial projects. A large commercial project may require a more extensive worksheet, such as the one in Minnesota's Construction Materials Recycling Guidebook.

Units of Measurement. This worksheet uses tons as the standard unit of measurement. You may substitute cubic yards for tons if it is used consistently throughout the worksheet.

Part A—Segregated Materials

- Find recyclers in the project area by ordering the recyclers list Construction and Demolition Recyclers—Processors and Receivers (publication #431-96-017) from the CIWMB Hotline at 1-800-553-2962, or you may access the same list as a searchable database on the CIWMB Internet site at www.ciwmb.ca.gov/ConDemo/.
- Choose a few materials that are easily separated and recycled. Don't overwhelm yourself at the beginning by trying to do it all. This worksheet has been set up to evaluate only four commonly recycled materials: wood, cardboard, concrete, and metals. If necessary, you may substitute other materials.
- For each material, calculate the estimated labor costs (per ton), hauling costs (per ton), and tipping fees (per ton) and add together to determine the

cost per ton to recycle that material if it is source-separated.

Part B-Recycling Mixed Materials

A materials recovery facility (MRF) accepts mixed debris and removes the marketable materials, usually by a combination of hand and machine sorting.

- Determine if there is a MRF in your area that accepts C&D debris by visiting the C & D Recyclers Database at www.ciwmb.ca.gov/ConDemo /Recyclers/
- If there is no MRF nearby, skip Part B. If there is, calculate the estimated labor costs (per ton), hauling costs (per ton), and tipping fees (per ton) and add together to determine the cost per ton to recycle mixed debris at the MRF.

Part C-Landfill

- Locate the landfill nearest the project that accepts C&D debris by consulting your local phone book or by contacting your Local Enforcement Agency for solid waste management.
- Fill in the blanks for labor costs (per ton), hauling costs (per ton), and tipping fees (per ton) and add together to determine the cost per ton to dispose of mixed debris.

Part D---Comparison

To determine the most cost-effective option for each material, transfer cost information from Part A (segregated recycling), Part B (MRF recycling), and Part C (landfilling), and compare costs per ton of material.

CIWMB Contact

For questions, comments, and suggestions on this worksheet, contact Sabra Ambrose at sambrose@ciwmb.ca.gov, (916) 341-6464.

Project		Date	
Prepared by			
Part A–Se	gregated Materials		
Wood:	tons		
Labor:	Time to separate one ton x Labor to separate one ton x		= \$
Hauling:	Travel time to recycler x Hauling vehicle cost x ÷ Tons per haul ÷	\$/hour	= \$
Tipping:	Recycler's tipping fee per ton	\$TOTAL=\$	\$
Cardboard:	tons	. <u> </u>	
Labor:	Time to separate one ton x Labor to separate one ton x		= \$
Hauling:	Travel time to recycler x Hauling vehicle cost x ÷ Tons per haul ÷	hours \$hourtons	= \$
Tipping:	Recycler's tipping fee per ton	\$ TOTAL= \bigs\square	\$
Concrete: _	tons		

Labor:	Time to separate one ton x Labor to separate one ton			= \$
			_	
Hauling:	Travel time to recycler		_ hours	
	x Hauling vehicle cost	× \$	/hour	
	÷ Tons per haul	÷	_ tons	= \$
Tipping:	Recycler's tipping fee per to	n \$		—= \$ <u> </u>
		TOTAL=	\$	
Metals: to	ons			
Labor:	Time to separate one ton			•
	x Labor to separate one ton	x \$	/hour	= \$
Hauling:	Travel time to recycler		hours	
	x Hauling vehicle cost	x \$	/hour	
	÷ Tons per haul	÷	tons	= \$
Tipping:	Recycler's tipping fee per to	on \$		= \$
		TOTAL=		\$.
Port P. Poove	ling Miyad Mataria	le:	tone	<u> </u>
Part B-Recyc	ling Mixed Materia		tons	
Labor:	Time to place one ton in bir	ı	hours	
	x Labor to place one ton in bir	אר \$	/ hour=	\$
Hauling:	Travel time to MRF		hours	
	x Hauling vehicle cost	x \$	/ hour	
	÷ Tons per haul	÷	tons	= \$
Tipping;	MRF tipping fee per ton	\$		= \$

TOTAL=

\$ 	

Part C-La	endfill: tons			
Labor:	Time to place one ton in b	in ł	nours	
	x Labor to place one ton in bi	n x \$/	hour=	\$
Hauling:	Travel time to landfill	}	nours	
	x Hauling vehicle cost	x \$/	hour	
	+ Tons per haul	+1	ons	= \$
Tipping:	Landfill tipping fee per ton	\$		= \$
		TOTAL=		\$

Part D-Cost Comparison

To determine the most cost-effective option for each material, transfer cost information from Parts A, B, and C, and compare costs per ton of material.

From Part A - Segregated:	From Part B - MRF:	\$
Wood per ton	\$	
Cardboard per ton	\$	
Concrete per ton	\$ From Part C - Landfill:	\$
Metals per ton	\$	

Appendix B: Waste Management Specifications

Section 01151

Solid Resources Management

Part 1 General

- 1.1 Summary
- A. This Section Includes the Following: Procedures for ensuring optimal diversion of construction waste materials generated by the Work within the limits of the Construction Schedule and Contract Sum.
- 1. Assembly Bill 939, California Solid Waste Management Act, requires that localities throughout the state develop source reduction, re-use, recycling, and composting programs, to reduce the tonnage of solid waste disposed in landfills 50% by the year 2000. Construction waste materials generated by the Work are targeted to achieve these diversion rates.
- 2. The Work of this Subcontract shall provide for a minimum of 75% by weight of the solid resources generated in the Work to be diverted from landfill disposal through a combination of re-use and recycling activities.
- 3. This section includes requirements for submittal of Subcontractor's Solid Resources Management Plan prior to the commencement of the Work and Subcontractor's quantitative reports for construction waste materials generated by the Subcontractor as a condition of approval of progress payments submitted to the General Contractor.
- 1.2 Definitions
- A. Class III Landfill: A landfill that accepts non-hazardous resources such as household, commercial, and industrial waste, resulting from construction, remodeling, repair, and demolition operations. A Class III landfill must have a solid waste facilities permit from the California Integrated Waste Management Board (CIWMB) and is regulated by the Enforcement Agency (EA).
- B. Construction and Demolition Debris: Building materials and solid waste resulting from construction, remodeling, repair, cleanup, or demolition operations that are not hazardous as defined in California Code of Regulations, Title 22, Section 66261.3 et seq. This term includes, but is not limited to, asphalt concrete, Portland cement concrete, brick, lumber, gypsum wallboard, cardboard and other associated packaging, roofing material, ceramic tile, carpeting, plastic pipe, and steel. The debris may be commingled with rock, soil, tree stumps, and other vegetative matter resulting from land clearing and landscaping for construction or land development projects.
- C. C&D Recycling Center. A facility that receives only C&D material that has been separated for reuse prior to receipt, in which the residual (disposed) amount of waste in the material is less than 10% of the amount separated for reuse by weight.
- D. Disposal. Final deposition of construction and demolition or inert debris into land, including stockpiling onto land of construction and demolition debris that has not been sorted for further processing or resale, if such stockpiling is for a period of time greater than 30 days; and construction and demolition debris that has been sorted for further processing or resale, if such stockpiling is for a period of time greater than one year, or stockpiling onto land of inert debris that is for a period of time greater than one year.
- E. Enforcement Agency (EA). Enforcement agency as defined in Public Resources Code 40130.
- F. Inert Disposal Facility or Inert Waste Landfill: A disposal facility that accepts only inert waste such as soil and rock, fully cured asphalt paving, uncontaminated concrete (including

fiberglass or steel reinforcing rods embedded in the concrete), brick, glass, and ceramics, for land disposal.

- G. Mixed Debris: Loads that include commingled recyclable and non-recyclable materials generated at the construction site.
- H. Mixed Debris Recycling Facility: A processing facility that accepts loads of commingled construction and demolition debris for the purpose of recovering re-usable and recyclable materials and disposing the non-recyclable residual materials.
- I. Recycling: The process of sorting, cleansing, treating and reconstituting materials for the purpose of using the altered form in the manufacture of a new product. Recycling does not include burning, incinerating or thermally destroying solid waste.
- J. Reuse. The use, in the same or similar form as it was produced, of a material which might otherwise be discarded.
- K. Separated for Reuse. Materials, including commingled recyclables, that have been separated or kept separate from the solid waste stream for the purpose of additional sorting or processing those materials for reuse or recycling in order to return them to the economic mainstream in the form of raw material for new, reused, or reconstituted products which meet the quality standards necessary to be used in the marketplace, and includes materials that have been "source separated".
- L. Solid Waste: Refer to Public Resources Code Section 40191.
- M. Source-Separated: Materials, including commingled recyclables, that have been separated or kept separate from the solid waste stream at the point of generation, for the purpose of additional sorting or processing of those materials for reuse or recycling in order to return them to the economic mainstream in the form of raw materials for new, reused, or reconstituted products which meet the quality standards necessary to be used in the marketplace.
- N. Waste Hauler: A company that possesses a valid permit from the Sacramento Regional County Solid Waste Authority to collect and transport solid wastes from individuals or businesses for the purpose of recycling or disposal in Sacramento.
- 1.3 Submittals
- A. Subcontractor's Solid Resources Management Plan
- 1. Review Contract Documents and estimate the types and quantities of materials under the Work that are anticipated to be feasible for on-site processing, source separation for re-use or recycling. Indicate the procedures that will be implemented in this program to effect jobsite source separation, such as, identifying a convenient location where dumpsters would be located, putting signage to identify materials to be placed in dumpsters, etc.
- 2. Refer to Section 01151C or access the CIWMB website at www.ciwmb.ca.gov for a list of local reuse and recycling organizations and companies.
- 3. Prior to commencing the Work, submit Subcontractor's Solid Resources Management Plan. Submit in format provided herein as Section 01151A. Solid Resources Management Plan must include, but not be limited to the following:

SOLID RESOURCES MANAGEMENT

- Subcontractor and project identification information;
- b. Procedures to be used;
- c. Materials to be re-used and recycled;
- Estimated quantities of materials;
- e. Names and locations of re-use and recycling facilities/sites;
- f. Tonnage calculations that demonstrate that Subcontractor will re-use and recycle a minimum 75% by weight of the construction waste materials generated in the Work.
- 4. Subcontractor's Solid Resources Management Plan must be approved by the Design Builder prior to the Start of Work.
- 5. Subcontractor's Solid Resources Management Plan will not otherwise relieve the Subcontractor of responsibility for adequate and continuing control of pollutants and other environmental protection measures.
- B. Subcontractor's Reuse, Recycling, and Disposal Report
- 1. Submit Subcontractor's Reuse, Recycling, and Disposal Report on the form provided herein (Section 01151B) with each application for progress payment. Failure to submit the form and its supporting documentation will render the application for progress payment incomplete and delay progress payments. If applicable, include manifests, weight tickets, receipts, and invoices specifically identifying the Project for re-used and recycled materials:
- a. On-site crushing of asphalt and concrete for use off-site.
- b. Reuse of building materials or salvageable items.
- Source separated recycling facilities.
- Mixed debris recycling facilities.
- e. Recycling of material, including soils, as landfill alternative daily cover.
- f. Delivery of soils or mixed inerts to an inert landfill or other use.
- g. Disposal of soils or other materials at a landfill or transfer station.
- h. Other (describe).
- C. Subcontractor's Reuse, Recycling, and Disposal Report must quantify all materials generated in the Work, disposed in Class III Landfills, or diverted from disposal through recycling. Indicate zero (0) if there is no quantity to report for a type of material. As indicated on the form:
- 1. Report disposal or recycling either in tons or in cubic yards: if scales are available at disposal or recycling facility, report in tons; otherwise, report in cubic yards. Report in units for salvage items when no tonnage or cubic yard measurement is feasible.
- 2. Indicate locations to which materials are delivered for reuse, salvage, recycling, accepted as daily cover, inert backfill, or disposal in landfills or transfer stations.
- 3. Provide legible copies of weigh tickets, receipts, or invoices that specifically identify the project generating the material. Said documents must be from recyclers and/or disposal site operators that can legally accept the materials for the purpose of re-use, recycling, or disposal.
- a. Indicate project title, project number, progress payment number, name of the company completing the Subcontractor's Report and compiling backup documentation, the printed name,

signature, and daytime phone number of the person completing the form, the beginning and ending dates of the period covered on the Subcontractor's Report, and the date that the Subcontractor's Report is completed.

Part 2 Products

(Not used.)

Part 3 Execution

- 3.1 Salvage, Re-Use, Recycling And Procedures
- A. Identify re-use, salvage, and recycling facilities: Refer to Section 01151C, or access the CIWMB website at www.ciwmb.ca.gov for a list of local organizations and companies.
- B. Develop and implement procedures to re-use, salvage, and recycle new construction and excavation materials, based on the Contract Documents, the Subcontractor's Solid Resources Management Plan, estimated quantities of available materials, and availability of recycling facilities. Procedures may include on-site recycling, source separated recycling, and/or mixed debris recycling efforts.
- 1. Identify materials that are feasible for salvage, determine requirements for site storage, and transportation of materials to a salvage facility.
- 2. Source separate new construction, excavation and demolition materials including, but not limited to the following types:
- a. Asphalt.
- b. Concrete, concrete block, slump stone (decorative concrete block), and rocks.
- c. Green materials (i.e. tree trimmings and land clearing debris).
- d. Metal (ferrous and non-ferrous).
- e. Red Clay Brick.
- f. Soils.
- g. Wood.
- h. Other new materials, as appropriate, such as wood and corrugated cardboard.
- 3. Develop and implement a program to transport loads of mixed (commingled) new construction materials that cannot be feasibly source separated to a mixed materials recycling facility.
- 3.2 Disposal Operations And Waste Hauling
- A. Legally transport and dispose of materials that cannot be delivered to a source separated or mixed recycling facility to a transfer station or disposal facility that can legally accept the materials for the purpose of disposal.
- B. Use a permitted waste hauler or Subcontractor's trucking services and personnel. To confirm valid permitted status of waste haulers, contact the Sacramento Regional County Solid Waste Authority, Pat Quinn, (916) 875-7082.
- C. Become familiar with the conditions for acceptance of new construction, excavation and demolition materials at recycling facilities, prior to delivering materials.
- D. Deliver to facilities that can legally accept new construction, excavation and demolition materials for purpose of re-use, recycling, composting, or disposal.

CAPITOL AREA EAST END COMPLEX BLOCKS 171-174 CLARK/GRUEN DESIGN/BUILD INC. CONSTRUCTION DOCUMENTS SOLID RESOURCES MANAGEMENT 01151-4 DECEMBER 15, 2000

- E. Do not burn, bury or otherwise dispose of solid waste on the project job-site.
- 3.3 Re-Use And Donation Options
- A. Implement a re-use program to the greatest extent feasible. Options may include:
- 1. California Materials Exchange (CAL-MAX) Program is sponsored by the California Integrated Waste Management Board. CAL-MAX is a free service provided by the California Integrated Waste Management Board, designed to help businesses find markets for materials that traditionally would be discarded. The premise of the CAL-MAX Program is that material discarded by one business may be a resource for another business. To obtain a current Materials Listings Catalog, call CAL-MAX/California Integrated Waste Management Board at 1-877-520-9703 or send an email to CalMAX@ciwmb.ca.gov. The CALMAX Catalog is available through the Internet Site at www.ciwmb/ca.gov/Calmax/.
- Other re-use organizations or activities including those identified in Section 01151C.
- 3.4 Revenue
- A. Revenues or other savings obtained from recycled, re-used, or salvaged materials shall accrue to Subcontractor unless otherwise noted in the Contract Documents.

END OF SECTION



SOLID RESOURCES MANAGEMENT



Subcontractor's Solid Resources Management Plan (To be Submitted and Approved Prior to Commencement of Work)			
Project Title:	CAPITOL AREA EAST	END COMPLEX	
Project No.:	105171		·
Subcontractor	r's Name:		
Street Addres	s:		
City, State, Zi	p:		
Phone:		Fax:	
Date Submitte	ed:	Prepared By:	
These are the	procedures to be used for	r re-using, salvaging, or recycling materia	als. Indicate the

These are the procedures to be used for re-using, salvaging, or recycling materials. Indicate the procedures (by number), types of materials, and estimated quantities that will be recycled or disposed in the sections below:

Source separation of materials and separately hauling to recyclers Hauling mixed recyclables to a mixed debris recycling facility Other (describe):

Section 01151A

I. Re-Use/Salvage/Recycling Of Materials					
Type of Material Number of Procedure to Be Used (as above) Facility to be Used/Location	Procedure to		Estimated Quantit (whenever availab		
	Tons	Cubic Yards	Units		
Example:	1	ABC Recyclers, Sacramento	120		-
Concrete					
Asphalt/Concrete					
Corrugated Cardboard					
Soils (clean)					
Wood/Green					
Scrap Metal					
Salvage Items (describe):					
Other (describe):					
Misc. Construction debris					

	II. Disposal Of Materials				
Type of Material	Facility to be Used/Location			ed Quantities ver available)	
		Tons	Cubic Yards	Units	
Example:	XYZ Disposal	60			
Misc. Construction Debris	Sacramento				
Asphalt/Concrete					
Gypsum Board					
Soils (clean)					
Wood/Green					
Scrap Metal					
Other i.e., Cardboard, Paint) Please Describe:					
Misc. Construction Debris		<u> </u>			
01151-A Subcontractor's Solid Resort Landfill Diversion Rate Calc					
Number of Tons to be Re- used and Recycled	Example: 10,000 tons		TONS		
Number of Tons to be Disposed	Example: 2,500 tons		TONS	·	
Total Tons Generated	Example: 12,5000 tons		TONS		
Landfill Diversion Rate (Recycled Tons/Generated Tons = Diversion Rate)	Example: 10,000/12,500 = 80%		%		

END OF SECTION



SECTION 01151B

Subcontractor's Reuse, Recycling and Disposal Report (Submit with Each Progress Payment)

Project Title:

CAPITOL AREA EAST END COMPLEX

Project No.:

105171

Subcontractor's Name:

Street Address: City, State, Zip:

Phone:

Fax:

Date Submitted:

Prepared By:

These are types of recycling or disposal activities for material generated in your project. Indicate the type of recycling or disposal activity (by number), types of materials, and quantities recycled or disposed in the sections below:

- 1. Recycling of source separated materials at a recycling facility.
- 2. Recycling of mixed debris.
- 3. Recycling of material as landfill alternative daily cover.
- 4. Reuse of building materials and salvageable items.
- 5. Delivery of soils or mixed inerts to an inert landfill or other fill use.
- 6. Disposal at a landfill or transfer station.
- 7. Other (please describe):

Type of Material

A = Asphalt

C = Concrete

M = Metals

S = Soils

I = Mixed Inerts

D = Mixed Construction Debris

R = Salvage/Re-use

W = Wood

O = Other (Describe)

Type of Material (Put letter of material as above)	Type of Activity to be Used (Put number as above)	Facility to be Used/Location (Where materials are taken for disposal, recycling, other)	Total Truck Loads This Month (For the facility listed)	Total Quantities (All loads this month) (If Scales are available, report tons. Attach legible copies of weight tickets, receipts, or invoices that specifically identify the project generating materials. For salvage items, list quantity and approximate weight.)		
				Tons	Cubic Yards	Other documen- tation
Example:	1	ABC Recyclers, Sacramento	5		120	
Example: R	5	Building Resources, Sacramento				10 windows (40 lbs each)

CAPITOL AREA EAST END COMPLEX BLOCKS 171-174 CLARK/GRUEN DESIGN/BUILD INC. CONSTRUCTION DOCUMENTS SUBCONTRACTOR'S REUSE, RECYCLING AND DISPOSAL REPORT 01151B-1 DECEMBER 15, 2000

Section 01151C: Subcontractor's Reference List: a Partial List of Deconstruction, Reuse, and Recycling Organizations and Facilities

Contact the companies listed below in advance to arrange for recycling services that may include deconstruction, reuse, or recycling. Depending on the type of materials and quantities, companies may be available to process materials (such as concrete, asphalt, red clay brick, and wood) on-site and transport off-site for further processing and marketing. Other companies may have sites to which Contractor may deliver materials for recycling.

This partial list of companies is provided for the Subcontractor's convenience and information only. The Subcontractor shall verify the services provided and materials accepted by each company and shall not rely on the information provided in this list. The information was compiled from information provided by the California Integrated Waste Management Board, the City of Sacramento, and other sources. Additional recycling facilities may exist. In addition to this list, access the CIWMB Web site at www.ciwmb.ca.gov/ for a list of local reuse and recycling organizations and companies.

Contact	Services Provided/Materials Accepted:			
Deconstruction & Reuse Companies				
B&E Salvage 10401 Gerber Road, Sacramento (916) 423-1040	Salvage/Used Building Materials			
Beyond Waste 3262 Wilder Road, Santa Rosa (707) 792-2555 Contact: Pavitra Crimmel	Deconstruction services, used building material salvage, dismantling, and handwrecking			
Blue Collar Supply 4871 Florin Perkins Rd., Sacramento (916) 383-1442	Salvage/Used Building Materials			
Doors & Moore Surplus 1409 Del Paso Road, Sacramento (916) 920-2533	Salvage/Used Building Materials			
P&P Building Wrecking, Inc. 8589 Florin Road, Sacramento (916) 383-6198	Salvage/Used Building Materials			
The ReUse People 1119 Heritage Road, San Diego (619) 427-0430 Contact: Ted Reiff	Deconstruction services, used building material salvage, dismantling, and handwrecking			
Surplus Lumber Sales 4018 Taylor Road, Loomis (916) 652-5826	Used lumber sales outlet			
Wood Bros. Doors & Moldings 550 No. 16th St., Sacramento (916) 442-0716	Salvage/Used Building Materials			
Concrete and	Asphalt Recyclers			
California Concrete Crushing & Recycling 5980 Outfall Circle, Sacramento (916) 387-5050	Concrete and asphalt crushing for road base			

CAPITOL AREA EAST END COMPLEX BLOCKS 171-174 CLARK/GRUEN DESIGN/BUILD INC. CONSTRUCTION DOCUMENTS SUBCONTRACTOR'S REUSE, RECYCLING AND DISPOSAL REPORT 01151B-2 DECEMBER 15, 2000



<u> </u>	T
Harbor Sand and Gravel 28th St. & The American River, Sacramento (916) 442-9089	Concrete and asphalt crushing for road base
Raisch Products 99 Pullman Way, San Jose (408) 227-9222 Contact: John Armando	On-Site Crushing
Scrap Met	al Recyclers
A-1 Metals 2655 Elkhorn Blvd, Rio Linda (916) 991-5808	Scrap Metal, Glass, Plastic
Atlas Recycling 30 Arden Way, Sacramento (916) 929-7331	Scrap Metal
Schnitzer Steel-Sacramento 12000 Folsom Rd., Sacramento (916) 927-8153	Scrap Metal
Simsmetal America 130 No. 12th Street, Sacramento (916) 444-3380	Scrap Metal
Red C	lay Brick
Brening's Rock and Supply 6325 Auburn Blvd., Citrus Heights (916) 723-1717	Used Red Clay Brick
The Brick Yard-Used Brick 8988 Elder Creek Road, Sacramento (916) 381-8012	Used Red Clay Brick
Rustic Brick Manufacturing Co., Inc. 3150 Power Inn Rd., Sacramento (916) 452-8114	Used Red Clay Brick
Wood and G	reen Materials
City of Sacramento Compost Facility 2028 28th St. (28th & A), Sacramento (916) 264-7561 Contact Gary Van Dorst	Accepts wood and green materials for compost and soil amendment.
Continental Capital Wood Technology 8109 Watt Ave., #293, Antelope (916) 348-0127	Used wood
Phil Lionudakis Site located on Maheu St., Sacramento (916) 381-8191 (Cell) (209) 5838-8150 (Office)	Accepts wood and green materials for compost and soil amendment.
Tenneco 4545 Auburn Blvd., Sacramento (916) 381-3240	Used wood

CAPITOL AREA EAST END COMPLEX BLOCKS 171-174 CLARK/GRUEN DESIGN/BUILD INC. CONSTRUCTION DOCUMENTS SUBCONTRACTOR'S REUSE, RECYCLING
AND DISPOSAL REPORT
01151B-3
DECEMBER 15, 2000

Mixed Cons	truction Debris			
Note: Recycling rates and end-uses for recover greatly. It is important for the Contractor to ver recovered, end-products, and recycling percer	ify with facility operators the types of materials			
Atlas Disposal 3000 Power Inn Road, Sacramento (916) 737-0100 Contact: Robert Vanekoven	Recovers metal, wood, and cardboard from mixed debris loads for recycling.			
Florin-Perkins Transfer Station/Sacramento 4201 Florin Perkins Rd., Sacramento (916) 383-2660 Contact: Ken Whitmire	Recovers concrete, drywall, and wood from mixed debris loads for recycling.			
Kiefer Landfill 9700 Goethe Road, Suite C, Sacramento (916) 363-9390	Recovers asphalt, concrete, brick, appliances, flooring, glass, drywall, metal, paint, and wood from mixed debris loads for recycling.			
L&D Landfill 8635 Fruitridge Road, Sacramento (916) 737-8640 Contact: Wayne Schindler	Recovers cardboard, green materials, scrap metal; wood; concrete, and asphalt from mixed debris loads for recycling.			
Other	Materials			
A&J Floor Technical Services 8950 Osage Ave., Sacramento (916) 386-8095	Carpet padding			
Cal Waste Recovery 8642 Elder Creek Rd., Sacramento (916) 387-8425	Glass and wood			
Strategic Materials 5850 88th St., Sacramento (916) 388-1076	Glass			
Sunshine Padding & Foam Recycling 1645 Parkway Blvd. #B, Sacramento (916) 383-5213	Foam insulation, carpet padding			
Soils				
Harbor Sand and Gravel 28th St. & The American River, Sacramento (916) 442-9089	Clean, non-contaminated soils without concrete, asphalt, rebar or other debris.			
RMC Pacific Materials 3145 Kilgore Road Rancho Cordova, CA 95670 (916) 635-4614	Clean, non-contaminated soils without concrete, asphalt, rebar or other debris. An account with the company is required before materials can be accepted.			

CAPITOL AREA EAST END COMPLEX BLOCKS 171-174 CLARK/GRUEN DESIGN/BUILD INC. CONSTRUCTION DOCUMENTS SUBCONTRACTOR'S REUSE, RECYCLING AND DISPOSAL REPORT 01151B-4 DECEMBER 15, 2000

Granite Construction Contact Scott Wilcott (916) 564-8844	Clean, non-contaminated soils without concrete, asphalt, rebar or other debris. Contact Scott Wilcott to provide an estimate of the number of cubic yards of materials that would be delivered.
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CAPITOL AREA EAST END COMPLEX BLOCKS 171-174 CLARK/GRUEN DESIGN/BUILD INC. CONSTRUCTION DOCUMENTS SUBCONTRACTOR'S REUSE RECYCLING AND DISPOSAL REPORT 01151B-5 DECEMBER 15, 2000

Appendix C: Waste Management Plan

American Demolition Inc. Demolition Materials Management Plan Capitol Area East End Complex/State of California Project Number 105717

Site assessment and estimated quantities of materials was preformed on June 1, 2000. On Site processing and separation of materials is as follows:

- 1. Concrete
- Asphalt
- 3. Wood
- 4. Mixed Wood
- 5. Metals
- Green Waste/Tree limbs and trunks

On site processing and separation of materials that cannot be recycled, and which will be landfilled are as follows:

- 1. Stucco
- Plaster
- 3. Welded wire mesh
- 4. Mixed demolition debris
- 5. Ceiling tiles
- 6. Carpet
- 7. Drywall

Procedures to be used to process and separate materials are as follows:

- A) Track loader to be utilized to demolish and stockpile concrete.
- B) Track loader to be utilized to load trucks for disposal of concrete at recycling facility.
- C) Track loader to be utilized to demolish and stockpile asphalt.
- D) Track loader to be utilized to load trucks for disposal of asphalt at recycling facility.
- E) Loader and excavator will be used to process and stockpile clean wood materials.
- F) Loader to be used to load wood materials in trucks, and hauled to recycling facility for conversion to compost and by products.
- G) Loader and excavator will be used to demolish and stockpile non-recyclable materials.
- H) Loader will be used to load trucks with non-recyclable materials for hauling and disposal at landfill.
- Loader and excavator will used to separate and process metals for recycling.

Loader will be used to load trucks for hauling of metals to recycling center.

All recycled concrete and asphalt will be processed into crushed aggregate base material. Tree limbs and trunks are milled and used for lumber. Below are listed for convenience the primary disposal and recycling sites which will be utilized on the project.

The tonnage recycled, and the facilities, which will be utilized on this project, are as follows:

Concrete and asphalt / 12,904 tons

EBI Aggregates, 1201 South River Road West Sacramento Calif

Riverside Aggregate, Port of Sacramento Calif.

Demolition Debris / 249 tons

Florin-Perkins Landfill, Inc, 4201 Florin Perkins Road Sacramento Calif.

Red Clay Brick / 683 tons

Florin-Perkins Landfill, Inc, 4201 Florin Perkins Road Sacramento Calif.

Recyclable metals / 45 tons

(See attached form 0220C for list of recycling facilities)

Tree trunks and limbs / 525 tons

Harbor sand and gravel (Calif. Hardwood Producers) 200 28th Street Sacramento Calif.

Total project tonnage: 16,647

Total tonnage recycled: 1,3474

Total percentage recycled: 76.5%

See attached form 02220A for estimated quantities of materials.

See attached form 02220C for a list of organizations and facilities to be used during the project. American Demolition / Concrete Cutting Inc., Reserves the right to use any or all of the listed facilities. In addition, other facilities, which may not be listed, could be utilized. American will get prior approval from Clark Construction for other site not listed.

See attached form 02220A for tonnage calculations, recycled versus non-recycled.

The anticipated revenue from the sale of salvaged materials is approximately \$3,500.00

Landfill tipping fees, which will be saved from the recycling of asphalt and concrete approximately \$28,000.00

Landfill tipping fees, which will be saved from recycling of trees, is approximately \$6,720.00

Please note, the dollar amounts listed above are for data analyses only and all savings from recycling has been calculated into the original bid amount.

The only subcontractors who will directly handle recyclable materials, will be Kemper Tree Service of Roseville Calif. They will be performing tree demolition and will be recycling the trunks and limbs.

See below for a copy of the "subcontractor's reuse, recycling and disposal report." This report will be attached to the monthly invoice, along with the schedule of values.

SECTION 02220A SUBCONTRACTOR'S DEMOLITION MATERIALS MANAGEMENT PLAN (To Be Submitted and Approved Prior to Commencement of Work)

Project Title:

CAPITOL AREA EAST END COMPLEX

Project No.:

105171

Subcontractor's Name: American Demolition / Concrete Cutting

Street Address: 2337 American Ave. City, State, Zip: Hayward, Calif. 94545

Phone: 510-264-1890

Fax: 510-264-1898

Date Submitted: June 2, 2000

Prepared By: Lawrence Grauman

These are the procedures to be used for re-using, salvaging, or recycling materials. Indicate the procedures (by number), types of materials, and estimated quantities that will be recycled or disposed in the sections below:

- 1. Deconstruction (i.e. hand-wrecking) to recover salvageable materials
- 2. On-Site concrete and asphalt crushing for use off-site
- 3. Source separation of materials and separately hauling to recyclers
- 4. Hauling mixed recyclables to a mixed debris recycling facility
- 5. Other (describe):

I. Re-Use/Salvage/Recycling Of Materials

Type of Material	Number of Procedure to Be Used (as above)	Facility to be Used/Location	Estimated Quantities (whenever available)		
			Tons	Cubic Yards	Units
Concrete	3	EBI Aggregates	9738	6086	NA
Asphalt/Concrete	3	EBI Aggregates	3166	1978	NA
Corrugated Cardboard		,			
Soils (clean)					
Wood/Green	3	Calif. Hardwood	525	NA NA	NA
Scrap Metal	3	See form 0220c	45	NA	NA
Salvage Items (Describe):	None	None	NA	NA	NA
Other (Describe):					
Misc. Demolition Debris					

II. Disposal Of Materials Project Title: CAPITOL AREA EAST END COMPLEX Project No.: 105171 Type of Material Facility to be **Estimated Quantities** Used/Location (whenever available) Tons **Cubic Yards** Units Misc. Demolition Debris Florin-Perkins 2490 2988 Misc. demoition debris Asphalt/Concrete NA NA NA NA NA Gypsum Board NA NA NΑ NA Soils (clean) NA NA NA Wood/Green NA NΑ NA NA Scrap Metal NA NA NA NA Other (i.e., Cardboard, Paint) Brick/ Florin Perkins 683 621 NA Please Describe: Misc. Demolition Debris Section 02220A SUBCONTRACTOR'S DEMOLITION MATERIALS RECYCLING PLAN LANDFILL DIVERSION RATE CALCULATION Number of Tons to be Re-Used See pages 1 and 2 1374 tons and Recycled Number of Tons to be Disposed See pages 1 and 2 3173 tons **Total Tons Generated** 16647 tons Landfill Diversion Rate (Recycled 76.5 % Tons/Generated Tons = Diversion

Rate)

Section 02220C: Subcontractor's Reference List: A Partial List Of Deconstruction, Reuse, and Recycling Organizations and Facilities

Contact the companies listed below in advance to arrange for recycling services that may include deconstruction, reuse, or recycling. Depending on the type of materials and quantities, companies may be available to process materials (such as concrete, asphalt, red clay brick, and wood) on-site and transport off-site for further processing and marketing. Other companies may have sites to which Contractor may deliver materials for recycling.

This partial list of companies is provided for the Subcontractor's convenience and information only. The Subcontractor shall verify the services provided and materials accepted by each company and shall not rely on the information provided in this list.

This list was compiled from information provided by the California Integrated Waste Management Board, the City of Sacramento, and other sources. Additional recycling facilities may exist. In addition to this list, access the CIWMB Web site at www.ciwmb.ca.gov/ for a list of local reuse and recycling organizations and companies.

Contact	Services Provided/Materials Accepted:				
Deconstruction & Reuse Companies					
B&E Salvage 10401 Gerber Road, Sacramento (916) 423-1040	Salvage/Used Building Materials				
Beyond Waste 3262 Wilder Road, Santa Rosa (707) 792-2555 Contact: Pavitra Crimmel	Deconstruction services, used building material salvage, dismantling, and handwrecking				
Blue Collar Supply 4871 Florin Perkins Rd., Sacramento (916) 383-1442	Salvage/Used Building Materials				
Doors & Moore Surplus 1409 Del Paso Road, Sacramento (916) 920-2533	Salvage/Used Building Materials				
P&P Building Wrecking, Inc. 8589 Florin Road, Sacramento (916) 383-6198	Salvage/Used Building Materials				
The ReUse People 1119 Heritage Road, San Diego (619) 427-0430 Contact: Ted Reiff	Deconstruction services, used building material salvage, dismantling, and handwrecking				
Surplus Lumber Sales 4018 Taylor Road, Loomis (916) 652-5826	Used lumber sales outlet				
Wood Bros. Doors & Moldings 550 No. 16th St., Sacramento (916) 442-0716	Salvage/Used Building Materials				
Concrete and	Asphalt Recyclers				
California Concrete Crushing & Recycling 5980 Outfall Circle, Sacramento (916) 387-5050	Concrete and asphalt crushing for road base				

Harbor Sand and Gravel 28th St. & The American River, Sacramento	Concrete and asphalt crushing for road base				
(916) 442-9089 Raisch Products	On-Site Crushing				
99 Pullman Way, San Jose (408) 227-9222 Contact: John Armando					
Scrap Metal Recyclers					
A-1 Metals 2655 Elkhorn Blvd, Rio Linda (916) 991-5808	Scrap Metal, Glass, Plastic				
Atlas Recycling 30 Arden Way, Sacramento (916) 929-7331	Scrap Metal				
Schnitzer Steel-Sacramento 12000 Folsom Rd., Sacramento (916) 927-8153	Scrap Metal				
Simsmetal America 130 No. 12th Street, Sacramento (916) 444-3380	Scrap Metal				
Red Clay Brick					
Brening's Rock and Supply 6325 Auburn Blvd., Citrus Heights (916) 723-1717	Used Red Clay Brick				
The Brick Yard-Used Brick 8988 Elder Creek Road, Sacramento (916) 381-8012	Used Red Clay Brick				
Rustic Brick Manufacturing Co., Inc. 3150 Power Inn Rd., Sacramento (916) 452-8114	Used Red Clay Brick				
Wood and G	reen Materials				
City of Sacramento Compost Facility 2028 28th St. (28th & A), Sacramento (916) 264-7561 Contact Gary Van Dorst	Accepts wood and green materials for compost and soil amendment.				
Continental Capital Wood Technology 8109 Watt Ave., #293, Antelope (916) 348-0127	Used wood				
Phil Lionudakis Site located on Maheu St., Sacramento (916) 381-8191 (Cell) (209) 5838-8150 (Office)	Accepts wood and green materials for compost and soil amendment.				
Tenneco 4545 Auburn Blvd., Sacramento (916) 381-3240	Used wood				

truction Debris					
ered materials at the following facilities may vary ify with facility operators the types of materials nages for materials delivered to these sites.					
Recovers metal, wood, and cardboard from mixed debris loads for recycling.					
Recovers concrete, drywall, and wood from mixed debris loads for recycling.					
Recovers asphalt, concrete, brick, appliances, flooring, glass, drywall, metal, paint, and wood from mixed debris loads for recycling.					
Recovers cardboard, green materials, scrap metal; wood; concrete, and asphalt from mixed debris loads for recycling.					
Other Materials					
Carpet padding					
Glass and wood					
Glass					
Foam insulation, carpet padding					
Soils					
Clean, non-contaminated soils without concrete, asphalt, rebar or other debris.					
Clean, non-contaminated soils without concrete, asphalt, rebar or other debris. An account with the company is required before materials can be accepted.					
Clean, non-contaminated soils without concrete, asphalt, rebar or other debris. Contact Scott Wilcott to provide an estimate of the number of cubic yards of materials that would be delivered.					

Bibliography

- Conversion Factors for Individual Material Types. CalRecovery Incorporated, December 1991, pp. 15-21.
- Lewis, Michael, Jeffrey Vandall, and Neil Seldman. "Economic and Environmental Impacts of Construction and Demolition Recycling," Institute for Local Self-Reliance, January 1995, section VII.
- Strategies for Waste Reduction of Construction and Demolition Debris from Buildings. U.S. Environmental Protection Agency, June 2000, p. 1.
- Tchobanoglous, George. Integrated Solid Waste Management: Engineering Principles and Management Issues, New York: McGraw-Hill, 1993, p. 138, table 6-3.

Endnotes

- 1 Tchobanoglous, George, Integrated Solid Waste Management: Engineering Principles and Management Issues, 1993, p. 138, table 6-3.
 - 2 Communication with Kelly Ingalls of KMI Associates, May 19, 2003.
- 3 Conversion Factors for Individual Material Types, CalRecovery Incorporated, December 1991, pp. 15-21.
- 4 Strategies for Waste Reduction of Construction and Demolition Debris from Buildings, U.S. Environmental Protection Agency, June 2000, p. 1.
- 5 Lewis, Michael, Jeffrey Vandall, and Neil Seldman, Institute for Local Self-Reliance, "Economic and Environmental Impacts of Construction and Demolition Recycling," January 1995, section VII.
 - 6 Communication with Al Lopez, Lopez Agricultural Services, February 27, 2003.
 - 7 Communication with Tom Crane, Clark/Gruen Design Build, Inc., December 14, 2002.
 - 8 Ibid., December 14, 2002.
- 9 Project Memorandum from KMI Associates to Gruen Associates Architects, March 28, 2001.

EXHIBIT 15 CALIFORNIA SUPREME COURT CASE
Waste Management v. Palm Springs Recycling
Center (1994)

West Reporter Image (PDF)

7 Cal.4th 478, 869 P.2d 440, 28 Cal.Rptr.2d 461

View Cal./Cal.App. version

Briefs and Other Related Documents

Supreme Court of California,

In Bank.

WASTE MANAGEMENT OF THE DESERT, INC., et al., Plaintiffs and Respondents,

٧,

PALM SPRINGS RECYCLING CENTER, INC., Defendant and Appellant.

No. S029150.

March 31, 1994.

City and exclusive franchisee for solid waste hauling services brought suit to prevent commercial recycler from collecting recyclable material from large commercial customers. The Superior Court, Riverside County, No. I-64239, Ross G. Tharp, J., assigned, entered judgment in favor of city and waste hauler. Appeal was taken. The Court of Appeal affirmed in part and reversed in part. Petition for review was granted, superseding the opinion of the Court of Appeal. The Supreme Court, Baxter, J., held that: (1) California Integrated Waste Management Act did not apply to undiscarded recyclables, and (2) owner has right to sell undiscarded recyclable materials. Judgment of Court of Appeal affirmed with modification.

George, J., dissented and filed opinion in which Mosk, J., joined.
Opinion, 11 Cal.Rptr.2d 676, vacated.

West Headnotes

[1] KevCite Notes

=149E Environmental Law

49EVIII Waste Disposal and Management

— 149Ek354 k. Waste Subject to Regulation. Most Cited Cases (Formerly 199k25.5(5) Health and Environment)

⇒149E Environmental Law KeyCite Notes

<u>149EVIII</u> Waste Disposal and Management

=149Ek372 k. Salvage and Recycling. Most Cited Cases

(Formerly 199k25.5(5) Health and Environment)

Recyclable materials sold by owner is not "waste" under California Integrated Waste Management Act and owner is not required by Act to transfer these materials to waste hauler which has been granted exclusive franchise; recyclables have not been discarded. West's Ann.Cal.Pub.Res.Code § 40059(a) (2).

[2] KeyCite Notes

38 149E Environmental Law

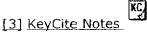
149EVIII Waste Disposal and Management

149Ek354 k. Waste Subject to Regulation. Most Cited Cases (Formerly 199k25.5(5) Health and Environment)

319

149E Environmental Law <u>KeyCite Notes</u>
149EVIII Waste Disposal and Management
149Ek372 k. Salvage and Recycling. <u>Most Cited Cases</u>
(Formerly 199k25.5(5) Health and Environment)

Discarding recyclable property that otherwise could have been sold renders property "waste" and subject to collection under exclusive franchise authorized by California Integrated Waste Management Act. West's Ann.Cal.Pub.Res.Code § 40059(a)(2).



149E Environmental Law

149EVIII Waste Disposal and Management
149Ek372 k. Salvage and Recycling. Most Cited Cases
(Formerly 199k25.5(5) Health and Environment)

Owner of undiscarded recyclables was not required by California Integrated Waste Management Act to transfer those recyclables to holder of exclusive solid waste hauling franchise; owner retained right to sell undiscarded recyclables. West's Ann.Cal.Pub.Res.Code § 40180.

***461 *481 **440 Crandall & Traver, Lynn D. Crandall and Lisa A. Garvin, Palm Desert, for defendant and appellant.

Flanigan & Flanigan, <u>Timothy H. Flanigan</u>, <u>Terrance W. Flanigan</u>, Sacramento, Ropers, Majeski, Kohn, Bentley, Wagner & Kane, <u>Michael J. Brady</u>, Susan S. Ellenberg, Redwood City, Sedgwick, Detert, Moran & Arnold, Sean H. Gallagher, Livingston & Mattesich, <u>James M. Mattesich</u>, San Francisco, <u>Carol L. Livingston</u>, <u>Lisa L. Halko</u>, Sacramento, Pillsbury, Madison & Sutro, <u>Kevin M. Fong</u>, <u>Sharon M. Solomon</u>, San Francisco, Stone & Moore and <u>John Douglas Moore</u>, San Francisco, as amici curiae on behalf of defendant and appellant.

<u>Jean Leonard Harris</u>, <u>J. Scott Zundel</u>, Palm Desert, Schlecht, Shevlin & Shoenberger and <u>Jon A. Shoenberger</u>, Palm Springs, for plaintiffs and respondents.

Hallgrimson, McNichols, McCann & Inderbitzen, Harvey E. Levine, <u>John T. Schreiber</u> and Claudia J. Martin, Pleasanton, as amici curiae on behalf of plaintiffs and respondents.

Shute, Mihaly & Weinberger, E. Clement Shute, Jr., San Francisco, Richard S. Taylor, Mill Valley, Astor & Phillips, Z. Harry Astor and John K. Astor, Orange, as amici curiae.

BAXTER, Justice.

The California Integrated Waste Management Act of 1989 (the Act) authorizes cities to grant exclusive franchises for solid waste ***462 **441 handling services. (Pub.Resources Code, § 40059, subd. (a)(2).) The question is whether this authority extends so far as to prohibit the owner of recyclable materials from selling them to someone other than the exclusive franchisee. Whether the Legislature has authorized such franchises is solely a question of statutory construction.

We hold the Act does not allow an exclusive franchise for the collection of recyclables not discarded by their owner. As we shall explain, the Act *482 authorizes exclusive franchises only for "solid waste handling." (Italics added.) An item that is sold is not discarded and thus does not become "waste" subject to an exclusive franchise.

The exclusive franchise agreement in this case between plaintiffs City of Rancho Mirage (City) and Waste Management of the Desert, Inc. (Waste Management) is therefore invalid and unenforceable to the extent the exclusive franchise purports to include recyclable materials that are not waste under the Act. The trial court erred in enjoining defendant Palm Springs Recycling Center, Inc. (Palm Springs Recycling) from collecting such recyclable materials within City limits.

FACTS

The City contracted with Waste Management for the collection and disposal of residential and

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commercial waste within the City limits (the Agreement). The Agreement consists of two parts, a "Refuse Collection Agreement and a Recycling Agreement." Under the Refuse Collection Agreement, Waste Management has the obligation and exclusive right to collect, receive, transport, segregate, recycle, and dispose of residential and commercial refuse of the type customarily deposited by residents and businesses in collection containers or areas for pickup and disposal. The Refuse Collection Agreement does not prohibit any person from transporting that person's own refuse to a legal dump site.

The Recycling Agreement provides that Waste Management has the obligation and exclusive right to collect and remove all specified materials that are segregated and placed in separate recycling containers at the curbside on public streets or adjacent to multifamily complexes or in bins at locations designated by commercial establishments. Subject to specified limitations, Waste Management is authorized to retain the revenue from the sale of recyclable materials.

When it entered into the Agreement, City adopted ordinance No. 8.12.010 (Ordinance), providing that "[a]ll garbage and rubbish accumulated in the city shall be collected, conveyed and disposed of by the city or by any person with whom the city has a contract for the collection, removal, and disposal of ashes, waste matter, garbage and rubbish. Except as otherwise provided in this chapter, no person, other than the city or its contract agent, shall collect, convey over any of the streets or alleys of the city, or dispose of any refuse accumulated in the city."

Under its exclusive franchise, Waste Management established a citywide recycling program for single-family residences, multifamily complexes, and commercial establishments.

*483 In May 1991, The City and Waste Management sued Palm Springs Recycling, alleging that beginning in 1990 Palm Springs Recycling "had been sending trucks into [the City] on a regular basis to collect recyclable material from large commercial customers" in violation of the rights of the City and Waste Management under the Agreement and the Ordinance, and had refused to comply with demands made by the City that Palm Springs Recycling cease those activities. The complaint sought preliminary and permanent injunctive relief prohibiting Palm Springs Recycling from collecting recyclable materials within the City.

Palm Springs Recycling admitted it had sent trucks into the City on a regular basis to collect recyclable materials from commercial customers and had continued to solicit new customers within the City's boundaries. It denied, however, engaging in illegal activities or interfering with plaintiffs' rights under the Agreement, asserting as affirmative defenses that: (1) The City had acted in excess of its police power by enacting the Ordinance and entering into the Agreement; (2) the Agreement constituted an illegal combination in restraint of trade under Business and Professions***463 **442 Code section 16600 et seq.; and (3) the Ordinance and Agreement, as construed by plaintiffs, constituted an invalid taking of property in violation of the Fifth Amendment to the United States Constitution and article I, section 19 of the California Constitution.

Palm Springs Recycling also filed a cross-complaint against plaintiffs: (1) essentially reasserting the affirmative defenses set forth in the answer to the complaint; (2) seeking an order enjoining Waste Management from providing recycling services to residents of the City at less than cost and enjoining the City from enforcing the Ordinance and the Agreement as they relate to recycling and the collection of recyclable materials; and (3) requesting related affirmative relief.

The City and Waste Management alleged as affirmative defenses to the cross-complaint that the Ordinance and Agreement were authorized by the Act and that the Agreement and enforcement of the Ordinance against Palm Springs Recycling were within the City's police power.

The trial court granted plaintiffs' application for a preliminary injunction. The court entered judgment for plaintiffs both on their complaint and on defendant's cross-complaint, enjoining Palm Springs Recycling from placing bins or other receptacles within the City for the purpose of collecting recyclable materials and from collecting or removing recyclable materials from within the City. (The judgment did not specifically define the term *484 "recyclable materials," but the context makes clear the term was intended to correspond to the use of the same term in the exclusive franchise contract. Palm Springs Recycling has not suggested the recycling activities enjoined by the judgment included the recycling of materials other than those that Waste Management must recycle under the Agreement.) The Court of Appeal reversed the judgment. The court held the Act does not authorize the City to grant an exclusive franchise for the collection and removal of "recyclable materials" that have not been placed into separate containers maintained by the City or its authorized waste collector or that otherwise are not "discarded" by the owner. The court relied on section 41952's provision that "[n] othing in this chapter limits the right of any person to donate, sell, or otherwise dispose of his or her recyclable materials." The court concluded that, until the generator of recyclable materials discards

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them into the specified bins, the owner retains control over the materials' disposition and is free to have them collected by a recycling enterprise of the owner's choice. The court further held the City's police power, apart from the Act, did not authorize the City to restrict recycling services to the waste collection enterprise exclusively designated by the City.

DISCUSSION

The Act sets forth a comprehensive statewide program for solid waste management. (<u>Pub.Resources Code</u>, § 40000 et seq.) (All further section references are to the Public Resources Code unless otherwise noted.) No one disputes that the Act allows a local agency to award an exclusive franchise for "solid waste handling" services. (§ 40059, subd. (a)(2), italics added.) The question is whether property with a market value to its owner-for example, a recyclable material-is "waste" within the scope of the Act and its exclusive franchise provision. We conclude this property is not "waste" until it is discarded. This construction encompasses two concepts-value and discarding-that in this context must be considered in relation to one another.

1. Economic value to the owner

"The concept of market value is perhaps most clearly stated in the poetic axiom that, 'The worth of a thing, is the price it will bring.' "(Union Pacific R.R. Co. v. State Bd. of Equalization (1989) 49 Cal.3d 138, 148, 260 Cal.Rptr. 565, 776 P.2d 267, quoting 1 Bonbright, Valuation of Property (1st ed. 1937) p. 15.) If the owner of a material can sell it, perhaps for the reason that it is recyclable, it has an economic (i.e., market) value to its owner.

*485 The Act's very title, the California Integrated *Waste* Management Act of 1989, and its repeated references to "solid *waste*," "solid *waste* handling," "recycling of solid *wastes*," and the like strongly indicate the ***464 **443 Legislature was concerned with just what it said- *waste*-and not with materials of economic value to their owner. The Act's own definition of "solid waste" further supports the view that valuable recyclables that have not been discarded are not waste. "Solid waste" is defined as "all putrescible and nonputrescible solid, semisolid, and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, dewatered, treated, or chemically fixed sewage sludge which is not hazardous waste, manure, vegetable or animal solid and semisolid wastes, and other discarded solid and semisolid wastes." (§ 40191, subd. (a).) This definition hardly connotes the notion of valuable materials.

The commonly understood meaning of "waste" is something discarded "as worthless or useless." (Amer.Heritage Dict. (1985) p. 1365, col. 1; Oxford English Dict. (2d ed. 1989), p. 958, col. 1.) If the owner sells his property-that is, receives value for it-the property cannot be said to be worthless or useless in an economic sense and is thus not waste from the owner's perspective. Conversely, if the owner voluntarily disposes of the property without receiving compensation or other consideration in exchange-that is, throws it away-the obvious conclusion is that the property has no economic value to the owner. The concept of value is in this sense related to the manner in which the property is disposed.

2. Valuable materials not discarded

The Act's definition of waste also reflects the traditional view that waste-at least for purposes of its collection-is material that has been *discarded* by its owner. Section 40191, subdivision (a) defines solid waste as being several enumerated types of materials and "other discarded solid and semisolid wastes." (Italics added.) The restrictive modifier "other discarded" plainly refers to all the enumerated materials in the statute, thereby meaning that an item is not waste until it is discarded. The Court of Appeal also relied heavily on this statutory definition of "waste" in concluding that "only discarded waste materials become solid waste subject to 'handling'" under the Act. Plaintiffs object to this approach, contending it would eviscerate the Act because owners could discard all their property-recyclable and otherwise-as they see fit and thereby render an exclusive solid waste handling franchise a nullity as a practical matter. In *486 other words, the Court of Appeal opinion might be read to mean that a property owner could decide unilaterally with whom he will discard his waste. If

three competing waste handlers (the exclusive franchisee and two others) placed their respective receptacles at the owner's curbside, he could put his waste into whichever container he chooses. Perhaps the Court of Appeal did not intend that result, but its opinion might be read as suggesting as much and, if so, we believe this result would be inconsistent with the Act's apparent intent. If, however, the concept of being discarded is properly understood, this perceived problem is easily avoided.

This returns us to the concept of value. Property that is sold for value-for example, a recyclable-is not "discarded" under any traditional understanding of the term. "Discard" means "to throw away." (Amer.Heritage Dict. (2d college ed. 1982) p. 402, col. 1.) It is not synonymous with the broader term "dispose," which means "To transfer or part with, as by giving or selling." (*Id.*, at p. 407, col. 2.) A homeowner, for example, can dispose of used furniture, clothing, or automobiles by discarding them or by selling them, but either method of disposition necessarily precludes the other. If he sells the property, he cannot discard it; and if he discards it, he cannot sell it. That "discard" connotes throwing away or abandoning has been well recognized in cases dealing with waste and related issues. (*American Min. Congress v. U.S. E.P.A.* (D.C.Cir.1987) 824 F.2d 1177, 1184; *Reading Co. v. City of Philadelphia* (E.D.Pa.1993) 823 F.Supp. 1218, 1236-1237; *Carothers v. Capozziello* (1990) 215 Conn. 82, 574 A.2d 1268, 1291; *Darling Delaware Corp. v. District of Columbia* (D.C.1977) 380 A.2d 596, 597; *Ticonderoga Farms v. County of Loudoun* (1991) 242 Va. 170, 409 S.E.2d 446, 449.)

***465 **444 The Court of Appeal opinion did not reflect the distinction between selling and discarding. Perhaps an example will illustrate. Assume that, as in this case, there is an exclusive franchise. A property owner throws his recyclables into the receptacle provided by the franchisee and does so without receiving compensation. He has plainly discarded his property, and it is thus waste under the Act. Could he instead throw the property into the bin of a competing waste hauler without receiving compensation? No, because by disposing of the property without receiving compensation, he has discarded the property and thereby rendered it waste that is subject to the exclusive franchise. If, however, he is paid for the material by the franchisee's competitor, the owner has sold the property and thus has not discarded it, so it has not become waste.

An especially relevant example of the distinction between selling and discarding is found in *487 Darling Delaware Corp. v. District of Columbia, supra, 380 A.2d 596, in which a company that purchased and transported meat fat and bones from grocery stores and markets and then sold them for processing into other products, e.g., tallow, soup, and margarine, was charged with hauling solid waste without a license. The question was whether the materials were waste. As in the present case, the statute defined waste as being "discarded materials." The court relied on the traditional meaning of "discard." "It 'indicates dispensing with, letting go of, getting rid of as not immediately useful." "(Id., at p. 597, quoting Webster's Third New Int'l. Dict. (1971).) The court then concluded, "At no point in the chain of purchase and sale of these animal by-products were they ever discarded. The record reflects that they were either sold by grocery stores directly to a few retail customers or frozen for sale to large buyers such as appellant. Appellant promptly transported them to plants in New York where they were resold for processing into other useful products. Since these materials were never thrown away as not immediately useful, they cannot be said to have constituted waste...." (Id., at p. 598, fn. omitted.) The same analysis obtains in this case. If an owner segregates recyclable or otherwise useful materials and sells them, he has not discarded them and they do not become waste. The view that all items enumerated in section 40191, subdivision (a) are waste, regardless of their value and whether they have been discarded, is further called into question by many of the types of items enumerated. For example, the statute refers to "paper." This can refer to all paper, however, only if the term is taken out of context and without consideration of value or the statute's stated limitation that it applies only to discarded materials. A piece of elaborate origami, a collector's autograph collection, or a watercolor painting are each indisputably paper, but we doubt anyone would seriously contend such an item is waste and that its owner cannot keep it or sell it as he sees fit. The obvious, intuitive, and correct response to the contention would be that the property has value and that the owner has not discarded the property if he sells it. That is, the property has not become waste.

The tension between plaintiffs and the Court of Appeal can be eliminated by relying on the distinction between selling and discarding. The Court of Appeal was correct that property does not become waste under the Act until discarded, but incorrect in suggesting (perhaps inadvertently) that the owner can discard the property as he sees fit. Discarding is governed by the Act. Selling and other methods of disposition by which the owner receives or donates the value of the recyclable materials are not

discarding and are not subject to the Act. The fundamental purpose of the Act is to reduce the amount of material entering into the waste stream. The buying *488 and selling of materials in the marketplace is inapposite to that purpose because those materials remain in circulation and do not enter into the waste stream.

The proper rule is this: If the owner of property disposes of it for compensation-in common parlance, sells it-it is not waste because it has not been discarded. The owner is not required under the Act to transfer this property to the exclusive franchisee. But, consistent with the purpose of the Act, an owner cannot *discard* property as he sees ***466 **445 fit. Discarding the property renders the property waste and subjects it to the Act.

3. The owner's right to sell recyclables

If one accepts the general proposition that an owner has a right to sell his property for value, the question then becomes whether a different rule should apply to a particular type of propertyproperty defined as recyclable materials in the Recycling Agreement between the City and Waste Management. Under plaintiffs' view, a special rule should apply to recyclables in light of the statutory definitions of solid waste handling and recycling. We read these provisions differently. "Solid waste handling" is defined as "the collection, transportation, storage, transfer, or processing of solid wastes." (§ 40195, italics added.) " Processing" is, in turn, defined as "the reduction, separation, recovery, conversion, or recycling of solid waste." (§ 40172, italics added.) Put simply, solid waste handling includes recycling- of solid waste. If, as explained above, the owner does not discard his property, it does not become waste in the first instance. Thus, even if the property might be viewed as a feasibly recyclable material, it is not necessarily a recyclable waste. The distinction is significant because only the recycling of waste is included within the Act's definition of solid waste handling and, in turn, the provision allowing exclusive franchises. Plaintiffs also point to section 40180's definition of "recycling" as "the process of collecting, sorting, cleansing, treating, and reconstituting materials that would otherwise become solid waste, and returning to the economic mainstream in the form of raw material for new, reused, or reconstituted products...." (Italics added.) Perhaps plaintiffs are relying primarily on the word "material" and concluding that all recyclable materials are subject to an exclusive franchise even if they do not become waste. If so, we disagree. Section 40180's reference to materials is merely an acknowledgment of the reality that, as a technological matter, materials are capable of being recycled. The provisions, however, that define solid waste handling *489 refer only to "recycling of solid waste," not to the recycling of solid materials. (§§ 40172 and 40195, italics added.) If the statutes were worded otherwise, the mere fact that something is capable of being recycled would render it subject to an exclusive franchise, thereby prohibiting the owner from selling it. Moreover, section 40180 is itself consistent with the view that only waste is subject to the Act. The section refers to "materials that would otherwise become solid waste." (§ 40180, italics added.) If an owner discards property, it enters into the waste stream if not recycled. But, if a material is sold, it is not a material "that would otherwise become solid waste." As explained above, it becomes waste only when discarded. Thus, if an owner sells an item, it does not enter the solid waste stream, the reduction of which is the fundamental purpose of the Act.

The injunction in this case is directed at a commercial recycling activity, but the logic of plaintiffs' view would extend inexorably to noncommercial activity as well, for example, a school newspaper drive, a youth group's gathering of empty soda pop containers, or clothing donations to the Salvation Army. (Indeed, even gifts from one individual to another would be suspect, for example, a person who gives scrap metal to a sculptor of welded art.) The items collected in such activities are often recyclable *materials*. Nothing, however, in the language or legislative history of the Act suggests the Legislature intended to eliminate gifts to charity or gifts between friends. As with items that are sold, gifts cannot be fairly said to have entered the solid waste stream. Moreover, a gift of valuable property, like a sale of such property, is a transfer of value and thus cannot properly be characterized as "discarding" under the Act.

In short, if the owner of recyclable materials *discards* them into the solid waste stream, they become solid waste subject to the Act, and an exclusive franchisee would have the right to collect that waste in accordance with its franchise agreement. If, however, the owner disposes of the recyclables for

compensation-in common parlance, sells them-the recyclables are not discarded and do not become

***467 **446 We therefore hold that the owner of undiscarded recyclables is not required to transfer them to the holder of an exclusive franchise under the Act. The Recycling Agreement between plaintiffs City of Rancho Mirage (City) and Waste Management of the Desert, Inc. (Waste Management) is unenforceable under the Act to the extent the franchise purports to include recyclable materials that have not become "waste," as we have construed the term.

*490 Plaintiffs contend Palm Springs Recycling is seeking "to skim the cream of the recycling business" by collecting only the more commercially valuable materials and that a comprehensive recycling program cannot be economically sustainable absent an exclusive franchise that includes recyclable materials. This misses the mark in two respects. First, it suggests that Palm Springs Recycling is somehow taking something of value from Waste Management. Not so. The "cream" belongs to the owner of the recyclable material. Second, the contention is better addressed to the Legislature. Our holding is based on the Act as it is written, not on a different, perhaps broader, version that could have been, or still may be, enacted.

Finally, we address plaintiffs' additional argument that the City's award of the exclusive franchise was a valid exercise of the police power. This argument is not clearly presented, but it seems to have two, perhaps three, aspects. First, the focus of the argument is the state's police power. In light of our conclusion that the Act does not support the exclusive franchise in this case, whether the state constitutionally could have framed the Act to allow the franchise is beside the point.

Second, plaintiffs also assert, albeit cryptically and only in passing, that the exclusive franchise is a valid exercise of the City's own police power. Plaintiffs seem to suggest the City properly exercised that power under the Act. The argument necessarily fails because, as we have explained, the Act does not itself authorize the franchise to extend to undiscarded recyclables.

Third, plaintiffs also suggest the City had the police power independent of the Act to award an exclusive franchise for the collection of undiscarded recyclables. We decline to decide the correctness of the Court of Appeal's determination of that issue. (Cal.Rules of Court, rule 29.2(a).) The primary focus in this court has been the scope of the City's power under the Act. And, the question of the City's own police power raises the important issue of whether the comprehensive Act has preempted any power the City might otherwise have had.

Under our construction of the Act, we need not address Palm Springs Recycling's other arguments.

DISPOSITION

The judgment of the Court of Appeal is affirmed with one modification. The court directed the trial court to issue an injunction prohibiting the City from enforcing the Ordinance against Palm Springs Recycling with respect to "recyclable materials [which] have not been turned over to City or its *491 agent as discussed in this opinion." This was consistent with the Court of Appeal's view that the owner of recyclables can discard them as it wishes. As we have explained, our view is narrower-that, if the materials are "discarded," as we have construed the term, they are subject to the exclusive franchise. To accommodate this difference, the judgment of the Court of Appeal is affirmed with directions to remand this matter to the trial court with directions to issue a permanent injunction and/or writ of mandate in favor of defendant Palm Springs Recycling prohibiting the City from enforcing the Ordinance either by criminal prosecution or injunctive relief against defendant for engaging within the City's boundaries in the business of collecting, receiving, transporting, segregating, recycling, and disposing of recyclable materials that are acquired for compensation by Palm Springs Recycling from commercial establishments.

Defendant shall recover its costs on appeal.

***468 **447 LUCAS, C.J., COTTLE, P.J. FN*, and KENNARD and PANELLI, FN** JJ., concur.

FN* Hon. Christopher C. Cottle, Presiding Justice, Court of Appeal, Sixth Appellate Dist., assigned by the Acting Chairperson of the Judicial Council.

FN** Retired Associate Justice of the Supreme Court sitting under assignment by the Chairperson of the Judicial Council.

GEORGE, Justice, dissenting.

I respectfully dissent.

In April 1990, the City of Rancho Mirage entered into an exclusive franchise agreement with Waste Management of the Desert, Inc. (Waste Management), under which Waste Management agreed to provide specified waste disposal and recycling services to all of the city's residents and commercial entities, at regulated rates, and the city, in return, agreed to authorize only Waste Management to provide such services within the city's boundaries. Shortly thereafter, Palm Springs Recycling Center, Inc. (Palm Springs Recycling), a competing commercial recycling enterprise, began sending its trucks into the city on a regular basis to collect recyclable material from large commercial customers, in violation of Waste Management's rights under the exclusive franchise agreement. In response, the city and Waste Management sought injunctive relief from the trial court, which granted an injunction prohibiting Palm Springs Recycling from engaging in recycling services within the boundaries of the City of Rancho Mirage in violation of the exclusive franchise agreement.

The majority overturns the trial court injunction, concluding that the City of Rancho Mirage lacked authority to enter into an exclusive franchise *492 agreement for recycling services, insofar as that agreement limited the right of competing recycling companies to purchase and collect designated recyclable materials within city limits. Although the majority acknowledges that, under the California Integrated Waste Management Act of 1989 (the Act), the Legislature explicitly has authorized municipalities to enter into exclusive franchise agreements for "solid waste handling services," the majority concludes that the municipality's authority under this legislation does not extend to "recyclable material" that has a market value and that the owner wishes to sell to a commercial entity other than the exclusive franchisee.

As I shall explain, I believe the majority's interpretation of the relevant legislation is clearly incorrect and will frustrate, rather than further, the important purposes of the Act by excluding a significant proportion of recyclable material from its operation. A glaring omission of the majority is its failure to acknowledge the fundamental legislative policies and objectives of the 1989 legislation-the promotion of "integrated waste management"-and the various components of the Act designed to accomplish these policies and objectives. Construing the statutory scheme as a whole, I believe it is clear that the Act authorizes the exclusive franchise agreement at issue in this case, and that the trial court did not err in enjoining the commercial activities of Palm Springs Recycling that violated the agreement, including the purchase and collection of materials that in the past would have been discarded as waste, but that now have some market value because of their recycling potential.

I

The Act comprises a comprehensive program for solid waste management throughout the state, reflecting the legislative concern that ever-increasing amounts of disposable waste, combined with diminishing waste disposal capacity, pose a threat of crisis proportion to the environment and the public health and welfare, presenting an "urgent need" for an "aggressive new integrated waste management program." (Pub.Resources Code, § 40000; see Assem.Natural Resources Com.Rep., "Integrated Waste Management: Putting a Lid on Garbage Overload (1988) p. i. ["Current State solid waste management policy is becoming increasingly ineffective in managing California's solid waste and is potentially harmful to public health and the environment."] [hereafter Assembly Report])

<u>FN1.</u> The Act incorporates in substantial part the provisions of its predecessor statutory scheme, the Solid Waste Management and Resource Recovery Act of 1972, formerly contained in the Government Code, the Health and Safety Code, and the Revenue and Taxation Code, the provisions of which were repealed or recodified concurrently with the adoption of the Act. (Stats.1989, ch. 1095, p. 3810.)

The Act also reflects, however, many of the concepts and policies developed by the Municipal Solid Waste Task Force (an arm of the federal Environmental Protection Agency) as set forth in the task force's 1989 report on the national waste management crisis. The introduction to the task force's report explains in part: "From 1960 to 1988,

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[the United States] generated more waste every year, both in total tonnage and in pounds per person, and this trend is projected to continue. In addition, we are running out of places to put our waste because old landfills are closing and few new landfills and combustors are able to be sited and built. There are concerns about potential threats to human health and the environment from combustor emissions and ash, from landfill emissions, leachate, and litter… [¶] … This report recommends using 'integrated waste management' systems to solve municipal solid waste generation and management problems at the local, regional, and national levels." (Final Rep. of the Municipal Solid Waste Task Force, United States Environmental Protection Agency, The Solid Waste Dilemma: An Agenda for Action (Feb.1989) pp. 1-2.)

All further statutory references are to the Public Resources Code unless otherwise indicated.

***469 **448 Under the Act, the responsibility for solid waste management is shared by the state and local governments (§ 40001), with solid waste handling services to be provided by one or any combination of the following: the local *493 entity itself, another local entity, or a private waste collection enterprise (§ 40058). A major component of the Act, not contained in the predecessor statutory scheme, is the substantial mandatory solid waste disposal diversion requirements imposed by section 41780. That section provides in part that cities and counties, through solid waste reduction, recycling, and composting activities, "shall divert 25 percent of all solid waste from landfill ... by January 1, 1995" and "50 percent of all solid waste by January 1, 2000." (§ 41780, subd. (a) (1), (2).)

To meet these waste diversion requirements, the Act requires cities to develop and implement integrated waste management plans providing for the reduction, recycling, and reuse of solid waste, to the maximum extent feasible, in an efficient and cost-effective manner. [N2] (§§ 40052, 40900, 41000.) Such local plan must include a "source reduction and recycling element" (§§ 40901, 41000), which in turn must incorporate a "recycling" component. (§ 41003.) The recycling component must include a recycling program and implementation schedule that demonstrate the recycling methods, in combination with the source reduction and composting components, *494 by which the city will reduce a sufficient amount of solid waste disposed of by the city in order to comply with the diversion requirements of section 41780. (§ 41070.) Failure to submit a timely plan incorporating these components, or failure to implement the plan and meet the diversion requirements and deadlines, will subject a city to penalties of up to \$10,000 per day. (§§ 41813, 41850.)

FN2. In its report, cited at footnote 1, ante, the Municipal Solid Waste Task Force observes that "[a] key element of integrated waste management is the hierarchy, which favors source reduction (including reuse) to first decrease the volume and toxicity and increase the useful life of products in order to reduce the volume and toxicity of waste. Recycling (including composting) is the preferred waste management option to further reduce potential risks to human health and the environment, divert waste from landfills and combustors, conserve energy, and slow the depletion of nonrenewable natural resources." (The Solid Waste Dilemma: An Agenda for Action, supra, at p. 2, italics in the original.) This suggested hierarchy is adopted in section 40051, providing in part that local agencies shall "[p]romote the following waste management practices in order of priority: [¶] (1) Source reduction. [¶] (2) Recycling and composting. [¶] (3) Environmentally safe transformation and environmentally safe land disposal, at the discretion of the city or county." (§ 40051, subd. (a).)

The requirement of an integrated waste management plan corresponds to the recommendation of the Assembly Report that California waste management "be revised to place greater emphasis on a multifaceted approach to solving the State's garbage woes" through an *integrated* waste management program, in which *mandatory recycling* measures may be incorporated into the overall solid waste planning process. (Assem. Rep., *supra*, at pp. i., 1-2, 53-60.)

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Long before the adoption of the Act, it was well established that the regulation and control***470
**449 of waste collection and disposal constituted a proper exercise of municipal police power reserved to state and local governments. (See <u>City of Camarillo v. Spadys Disposal Service</u> (1983)
144 Cal.App.3d 1027, 1030, 193 Cal.Rptr. 22; <u>Matula v. Superior Court</u> (1956) 146 Cal.App.2d 93, 99-101, 303 P.2d 871; <u>Davis v. Santa Ana</u> (1952) 108 Cal.App.2d 669, 239 P.2d 656; see also Health & Saf.Code, former § 4250; Gov.Code, former § 66757, subd. (b).) Furthermore, for nearly a century, California courts explicitly have affirmed the authority of cities and counties, in the exercise of their police power, to control waste collection and disposal by the means deemed most effective for the public health and safety, including the granting of exclusive waste collection and disposal privileges to one or more private enterprises.

Thus, for example, in In re Zhizhuzza (1905) 147 Cal. 328, 81 P. 955, this court, upholding a city ordinance restricting waste collection privileges by exclusive contract, held: "'Laws or ordinances enacted under the police power for the protection of the public health, reasonably adapted to that end, are not unconstitutional because they may incidentally operate to deprive individuals of their property or its use without compensation, or interfere with their personal liberty, nor because they may give one person a monopoly of a certain business or occupation, private rights being required to yield in such case to the public good." " (Id., at p. 335, 81 P. 955; see California Reduction Company v. Sanitary Works (1905) 199 U.S. 306, 321, 26 S.Ct. 100, 104, 50 L.Ed. 204 (granting of exclusive waste disposal privileges within City and *495 County of San Francisco was authorized by state constitutional provision for local determination of the "most appropriate method of protecting the public health in the matter of disposal of garbage, refuse and other materials found on private premises"]; Gardner v. Michigan (1905) 199 U.S. 325, 26 S.Ct. 106, 50 L.Ed. 212.) The principles articulated in *In re Zhizhuzza, supra,* have been reiterated and affirmed repeatedly in subsequent decisions rendered through the present decade. (See City of Camarillo v. Spadys Disposal Service, supra, 144 Cal.App.3d at pp. 1030-1032, 193 Cal.Rptr. 22 [decision to restrict the issuance of waste disposal permits to no more than one company "falls within the clearly articulated and affirmatively expressed policy of the state"]; City of Santa Rosa v. Industrial Waste & Debris Box Rentals, Inc. (1985) 168 Cal.App.3d 1132, 1135, 214 Cal.Rptr. 737; Universal By-Products, Inc. v. City of Modesto (1974) 43 Cal.App.3d 145, 149, fn. 1, 117 Cal.Rptr. 525; Matula v. Superior Court, supra, 146 Cal.App.2d at pp. 99-101, 303 P.2d 871; see also Hybud Equipment Corp. v. City of Akron, Ohio (6th Cir.1981) 654 F.2d 1187, 1192 ["Courts in literally hundreds of reported cases have upheld the authority of local governments to monopolize and control local garbage collection by eliminating or restraining competition among private collectors."].) Cities and other local entities that have opted to rely upon an exclusive franchise for all waste

Cities and other local entities that have opted to rely upon an exclusive franchise for all waste handling services within their local boundaries traditionally have explained such action on the ground that competition in the solid waste handling industry may impede necessary regulation and encourage cost-cutting devices that pose a threat to the public health. Such entities apparently have concluded that the designation of an exclusive waste handling enterprise is an efficacious method to ensure that all persons and businesses within a community will be served at reasonable rates, regardless of their individual circumstances, and to minimize the noise and disruption of collection. (See <u>City of Santa Rosa v. Industrial Waste & Debris Box Rentals, Inc., supra, 168 Cal.App.3d 1132, 1134-1135, 214 Cal.Rptr. 737.)</u>

III

Recognizing that local entities generally are in the best position to determine the preferable means of addressing the health and safety problems posed by the handling and disposal of waste, the Act contemplates that local agencies may utilize exclusive franchises with private solid waste handling enterprises to implement the purposes and requirements of the Act. Section 40059, subdivision (a), expressly authorizes local entities to determine all *496 aspects of solid waste handling of local concern, including whether ***471 "sol**450 id waste handling services" are to be provided by means of exclusive franchise or contract. (§ 40059, subd. (a).)

Definitions governing the construction of <u>section 40059</u>, <u>subdivision (a)</u>, are set forth in various provisions of the Act. "Solid waste handling" is defined as "the collection, transportation, storage, transfer, or processing of solid wastes." (§ 40195.) "Processing" is defined as "the reduction, separation, recovery, conversion, or *recycling* of solid waste." (§ 40172, italics added.) "Recycling" is defined as "the process of collecting, sorting, cleansing, treating, and reconstituting materials that would otherwise become solid waste, and returning them to the economic mainstream in the form of

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raw material for new, reused, or reconstituted products." (§ 40180.) The phrase "segregated from other waste material" is defined as including the "binding of recyclable material separately from other waste material" and the "physical separation of recyclable material from other waste material." (§ 40190, subds. (a), (b), italics added.)

Thus, in light of these definitions, under <u>section 40059</u>, <u>subdivision (a)</u>, a city may grant exclusively to a solid waste handling enterprise the right of "collection, transportation, storage, transfer, or processing of solid wastes." Because the "processing" of solid wastes includes the "recycling of solid wastes," which in turn includes "collecting — materials that would otherwise become solid waste —," the Act authorizes a city to grant by exclusive franchise to a single private recycling enterprise the right to provide commercial recycling services within city limits, including the collection and removal of recyclable materials specifically identified in the franchise agreement.

The public benefits of, and municipal purposes served by, an exclusive franchise for *recycling* services are demonstrated by the exclusive franchise agreement in the present case between the City of Rancho Mirage and Waste Management. Under this agreement, *at no additional cost to the city*, Waste Management is required to collect and remove all recyclable materials (as specified and defined therein) that are segregated and placed in separate recycling containers at the curbside on public streets or adjacent to multifamily complexes, or in bins at a location designated by commercial establishments. Waste Management also is required to provide and distribute containers to all residences, and bins to *all* commercial establishments, and must assist homeowners in participating in the curbside recycling program. As compensation for providing recycling services at no additional cost to the *497 city and its residents, Waste Management is authorized to retain a portion of the revenues generated from the sale of recyclable materials. FN3

<u>FN3.</u> Waste Management is authorized to retain the revenue from the sale of recyclable materials, except (1) in the event the curbside and multifamily recycling programs become "self-sufficient," Waste Management shall share with the city, on an equal basis, any revenue generated by these programs in excess of their cost, and (2) Waste Management is required to credit to each commercial customer a fixed percentage (depending upon the type of recyclable material involved) of the revenue received by Waste Management from the sale of recyclable materials collected from that customer.

The agreement further provides that Waste Management shall develop and implement a public-awareness program to promote and inform the community of the benefits of recycling. Finally, Waste Management is required to submit (to the city) monthly reports of the total tonnage of recyclable materials recovered and sold and the market prices of such materials, as well as yearly status reports designed to facilitate an assessment of the effectiveness of all aspects of the program. Thus, the exclusive franchise enables and requires Waste Management to provide a comprehensive recycling program throughout the city, offering recycling services to all city residents and commercial establishments, and promoting their participation in the recycling program. The exclusive franchise facilitates the city's coordination and supervision of recycling services within city limits, and provides the city with a helpful method of meeting its obligations under the Act; among other reasons, Waste Management will be motivated strongly to ensure that the city meets its waste diversion and reporting requirements under the Act, in that failure to ***472 **451 do so likely would mean a loss of franchise rights.

The exclusive nature of the rights accorded Waste Management under the agreement provides that entity with economic incentive to render the foregoing services and benefits, which it would not have under a nonexclusive arrangement. As explained by Waste Management in support of its application for preliminary injunction, the commercial customers that collect their recyclable materials in large bins generate far greater amounts of recyclable material and can be serviced much more efficiently. For this reason, according to Waste Management, commercial customers "are the key to the economic viability of the recycling program. Enough revenue must be realized from the sale of recyclable material generated by the few large commercial customers to cover the cost of servicing all customers for the program ultimately to succeed."

*498 The record indicates Palm Springs Recycling seeks to collect only the most commercially desirable recyclable materials, such as glass and cardboard, and to collect such materials only from large commercial establishments. Palm Springs Recycling has demonstrated no interest in the recyclable materials generated by residences and small commercial enterprises. As characterized by

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Waste Management, Palm Springs Recycling seeks "to skim off the cream of the recycling business," leaving "the less profitable and unprofitable recycling business to [Waste Management] which it is contractually bound to accept." Waste Management maintains that, absent enforcement of its exclusive franchise rights, the comprehensive recycling program is not economically viable.

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The majority concedes the Act authorizes exclusive franchises for solid waste handling services. The majority asserts, however, that "solid waste" as defined under section 40191, subdivision (a), of the Act does not include materials sold by the owner for recycling, because if sold the materials have not been "discarded" within the meaning of the statutory definition of "solid waste." For similar reasons, the majority also maintains that if an owner of property is able to sell that property for recycling purposes, such disposition of the property does not fall within the category of "solid waste handling" that may be covered by an exclusive franchise.

I agree with the majority that the exclusive solid waste collection and recycling rights of an exclusive franchisee such as Waste Management *do not arise* until the owner of the recyclable or nonrecyclable material discards that material for collection by a waste handling service or a commercial recycling enterprise, thus rendering this material a part of the solid waste stream. Thus, the concern of the majority that enforcement of an exclusive franchise for commercial recycling services would interfere with a Boy Scout paper drive, or some other civic or charitable operation, is unfounded. When, however, an owner chooses to dispose of material that previously would have been disposed of as waste, by transferring the property to a commercial recycling enterprise, I believe it is clear that the material has been "discarded" within the meaning of the Act, and that the exclusive franchisee has the exclusive right to perform those collection services.

The majority's conclusion, excluding from the ambit of the exclusive franchise arrangement authorized by the Act all material that a property owner chooses to sell for recycling purposes, is not supported either by the *499 fundamental purpose or the statutory language of the Act. As stated previously, the primary objective of the Act is to encourage and require integrated FN4 solid waste management, promoting recycling as the preferred waste management option over landfill disposal. To accomplish that goal, the Act establishes, as one of its major components, requirements for significant reductions in the amount of the solid waste disposed of at landfills. As stated, section 41780, subdivision (a), provides, in part, that cities and counties "shall divert 25 percent of all solid waste from landfill" by January 1, 1995, through "recycling ... activities," and "shall divert 50 percent of all solid waste" by January***473 1, 2000, **452 through "recycling ··· activities." The Act specifically provides in section 41781 that "(a) ... for the purpose of determining the base rate of solid waste from which diversion requirements shall be calculated, 'solid waste' includes ... ¶ (1) The amount of solid waste generated within a local agency's jurisdiction, the types and quantities of which were disposed of at a permitted disposal facility as of January 1, 1990." This provision makes clear that, if a material is of a type and quantity that was disposed of at a permitted disposal facility as of January 1, 1990, the recycling of that material would be considered part of the solid waste stream regulated by the Act. Nothing in the language of the statute suggests that solid waste diverted from landfill disposal through recycling, and thus regulated by the Act, includes only material that has no value to the owner or has not been sold by the owner for recycling purposes. Instead, the clear implication of the statutory language of the Act, interpreted as a whole, is that the "solid waste stream" includes material sold for recycling purposes where, but for the availability of recycling, the material otherwise would have been disposed of as landfill.

FN4. See footnote 2, ante.

Moreover, one of the primary purposes of the Act is to encourage more efficient methods of recycling, as well as the creation of markets for recycled materials (i.e., to make recyclable materials more commercially marketable). In light of this objective, it would be anomalous to interpret the Act as excluding a particular recyclable material from a city's integrated waste management program simply because, through technology encouraged by the Act, the recycling process for that particular material has become economically viable. Indeed, it may well be impossible for municipalities to further the Act's objectives and meet the Act's very substantial waste-diversion requirements if, as newer and more efficient recycling processes are developed and additional markets are created, municipalities

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cannot count, as part of the quantum of solid waste satisfying the waste-diversion requirements, those materials that, because of their recyclable potential, have achieved some commercial value to the owner. Correspondingly, if recyclable material sold by its owner for recycling purposes cannot be counted *500 under section 41780 as waste diverted from disposal through recycling, municipalities may have little incentive to encourage either new forms of recycling, or markets for recyclable materials.

Furthermore, if the recycling of material that has commercial value, and that may be sold by the owner, is not part of solid waste handling regulated by the Act, exclusive franchises for specified recycling services frequently may no longer be economically viable for the exclusive franchisee, thereby diminishing a municipality's ability to effectuate a comprehensive citywide recycling program such as that provided by Waste Management under the exclusive franchise agreement at issue. Under the majority's interpretation of the Act, a municipality would have no authority to prevent a competing commercial recycling enterprise such as Palm Springs Recycling from "skimming off the cream" of the recycling business, leaving many of the municipality's residents without an economically viable recycling program, FN5

FN5. Although the majority does not rely upon section 41952 in support of its holding, the Court of Appeal construed that provision as authorizing owners of recyclable materials to contract with a recycling enterprise of their choice for the collection of these materials, notwithstanding the existence of an exclusive franchise granted by the local governing entity. I conclude the Court of Appeal misconstrued the scope of section 41952. That statute appears in chapter 9 of part 2 of division 30 of the Public Resources Code (§§ 41950 et seq.), entitled "Unlawful Acts." The provisions of chapter 9 proscribe, among other actions, the unauthorized removal of recyclable materials from receptacles maintained for their collection. This provision relied upon by the Court of Appeal clarifies that chapter 9, proscribing "unlawful acts," does not in and of itself (1) require the owner of recyclable materials to dispose of them in curbside receptacles, (2) subject the owner of such recyclable materials to civil penalties for retrieval of an item previously placed in its own receptacle, or (3) otherwise restrict the owner's ability to sell or dispose of such materials.

By its express terms, however, section 41952 pertains solely to chapter 9. Although nothing in chapter 9 restricts the disposal of recyclable materials by the owner, as explained above, section 40059, subdivision (a), contained in a different part and chapter of the Act, does authorize a city to regulate commercial recycling services within city limits by exclusive franchise, and thereby to restrict the manner of collection and disposal of recyclable material by commercial entities. In view of its language, context, and purpose, section 41952 cannot reasonably be interpreted as repealing the authority of a local entity (to enter into exclusive franchises) explicitly conferred by section 40059, subdivision (a).

***474 **453 Finally, courts long have rejected the notion that the owner of waste material having some market value has an interest in that material superior to the police power to protect the public health and safety. (See <u>California Reduction Company v. Sanitary Reduction Works, supra, 199 U.S. 306, 26 S.Ct. 100; Gardner v. Michigan, supra, 199 U.S. 325, 26 S.Ct. 106; In re Pedrosian (1932) 124 Cal.App. 692, 13 P.2d 389; Ex parte Santos (1928) 88 Cal.App. 691, 264 P. 281.) More recently, the Sixth Circuit in <u>Hybud Equipment Corp. v. City of Akron, Ohio, supra, 654 F.2d 1187</u>, reached a similar conclusion in the context of recycling. In that case, the Court of Appeals upheld an ordinance *501 of the City of Akron requiring that all solid waste be delivered to the City's "waste to energy" facility. Rejecting the claim that recyclable material had become more valuable in modern times and that the older case law relating to the municipal police power to regulate waste therefore no longer was applicable, the court held: "The old cases are not anachronisms. They are not distinguishable on any of these grounds. The solid waste disposal problem is as serious today for cities as in the past, perhaps more serious." (Id., at p. 1193.)</u>

V

The provisions of the Act authorizing a municipality to establish an exclusive franchise for the recycling of material, even if the material is of the type that has a market value because of its potential for recycling, do not permit a municipality to require that the owner of such property dispose of it through the exclusive franchisee without receiving just compensation for such recyclable material. The just compensation rights of property owners, however, is not an issue presented by this case, because no property owner is a party to this action. Instead, the sole issue before us is whether a competing recycling company possesses the right to operate in violation of an exclusive franchise agreement (for recycling services) authorized by state law.

Moreover, it is important to note that *any* exclusive franchise for waste handling services will impinge to some extent upon the economic interests of property owners. Even when dealing with waste having *no* market value, an exclusive franchise for its collection and disposal may require that some residents pay rates for waste handling services higher than these particular residents might have been able to negotiate with a private enterprise other than the exclusive franchisee. As discussed previously, however, past cases repeatedly have affirmed the authority of municipalities to enter into exclusive franchises that limit the authority of individual residents to dispose of their waste, because of the general societal benefits afforded by an exclusive franchise-for example, the assurance that *all* persons and businesses within a community will be served at reasonable rates, without regard to their individual circumstances, and the reduction of the municipality's burden of supervising the safe delivery of these services.

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For the foregoing reasons, I believe that the city's grant of an exclusive franchise to Waste Management for solid waste handling services within city limits, including the recycling services described in the exclusive franchise agreement, was authorized by the Act. Therefore, I would reverse the *502 judgment of the Court of Appeal and remand the case to that court with directions to affirm the judgment entered by the trial court.

MOSK, J., concurs.

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Briefs and Other Related Documents (Back to top)

- 1993 WL 13021161 (Appellate Brief) Brief of Amicus Curiae Independent Recycling Association Institute for Local Self-Reliance Urban Ore, Inc. Wood Farms Chemsearch Earth Circle Garbage Reincarnation, Inc. E2 Environmental Enterprises San Francisco Community Recyclers (Dec. 13, 1993) Original Image of this Document with Appendix (PDF)
- 1993 WL 13021162 (Appellate Brief) Petition for Permission to File a Brief Amicus Curiae; Brief of Amicus Curiae Institute of Scrap Recycling Industries in Support of Appellant Palm Springs Recycling Center; and Request for Judicial Notice (Jul. 06, 1993) Original Image of this Document with Appendix (PDF)
- 1993 WL 13021215 (Appellate Brief) Application for Leave to File Brief Amicus Curiae and Brief Amicus Curiae of American Forest and Paper Association and California Wastepaper Dealers Association in support of Palm Springs Recycling Center, Inc., Defendant and Appellant (Jul. 06, 1993) Foriginal Image of this Document with Appendix (PDF)
- 1993 WL 13021216 (Appellate Brief) Application for Leave to File Amicus Curiae Brief and Amicus Curiae Brief of Californians Against Waste (Jun. 30, 1993) Criginal Image of this Document with Appendix (PDF)
- 1993 WL 13021158 (Appellate Brief) Brief of the Northern California Recycling Association, the Business Recyclers Educational Assistance Link, the Santa Clara County Manufacturing Group, Intellicorp, Inc. and Spirals as Amici Curiae in Support of Defendant and Appellant (Jun. 11, 1993)

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- 1993 WL 13021159 (Appellate Brief) Application for Leave to File Amicus Curiae Brief and Amicus Curiae Brief of Alameda County Waste Management Authority (Apr. 23, 1993) E Original Image of this Document with Appendix (PDF)
- 1993 WL 13021157 (Appellate Brief) Brief Amicus Curiae on Behalf of Cities of San Francisco, San Diego, et al., in Support of Plaintiffs and Respondents (Apr. 16, 1993) & Original Image of this Document with Appendix (PDF)
- 1993 WL 13021160 (Appellate Brief) Application for Leave to File Brief Amicus Curiae and Brief Amicus Curiae of California Refuse Removal Council (Feb. 17, 1993) Foriginal Image of this Document (PDF)
- 1993 WL 13021217 (Appellate Brief) Brief Amicus Curiae of California Refuse Removal Council (Jan. 29, 1993) Original Image of this Document with Appendix (PDF) END OF DOCUMENT

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EXHIBIT 16 CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD MEMORANDUM: REPORT ON REGULATORY IMPACTS, January 21, 2004

MEMORANDUM

To:

Peter Siggins, Legal Affairs Secretary

Date: January 21, 2004

Governor's Office

Via:

Terry Tamminen, Secretary

California Environmental Protection Agency

From:

Mark Leary, Executive Director

CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

Subject:

REPORT ON THE REGULATORY IMPACT OF REGULATIONS ADOPTED, AMENDED OR REPEALED SINCE JANUARY 6, 1999 –

EXECUTIVE ORDER S-2-03

Executive Order S-2-03 requires each agency to reassess the regulatory impact on business of any regulation for which it has adopted, amended or repealed since January 6, 1999, specifically addressing the following:

- The impact of the adopted, amended or repealed regulations on California businesses as required by California Government Code section 11346.3;
- The authority for the regulations pursuant to California Government Code sections 11342.1 and 11342.2; and,
- Conformity of the regulations with the criteria set forth in California Government Code section 11349.1 of necessity, authority, clarity, consistency, reference and nonduplication.

The California Integrated Waste Management Board ("CIWMB") has reassessed regulations that it has adopted, amended or repealed since January 6, 1999 and its original findings that each of these regulations did not have a significant adverse economic impact directly affecting California businesses and that they met the requirements of California Government Code section 11346.3. No new information has come to light since these regulations were enacted that would change the original economic analyses prepared for each of them. In addition, the Board has confirmed it had authority to adopt each of these regulations and that these regulations meet the requirements of California Government Code section 11349.1.

The regulatory packages reviewed were the following:

1999

- Unreliable Contractors Regulations
- SubTitle D Flexibility for Landfills
- Transfer/Processing Tier Regulations
- Recycled Content Plastic Trash Bags

2000

- Solid Waste (Orphan Site) Cleanup (AB 992)
- Farm and Ranch Clean-up Grants
- Inert Waste Reporting (SB 515)
- Enforcement and Compliance Requirements
- Modified Planning Requirements (SB 1066)
- Removal of Waste Tire Facility Exclusions
- Recycled Content Newsprint Certification Penalties
- RPPC Record-keeping

2001

- Enforcement and Compliance Procedures
- SB 2202 Revisions to Definitions of "District"

2002

- LEA Grants
- Putrescible Waste Transfer/Processing
- Insurance as a Financial Assurance Demonstration
- NonHazardous, Nonputrescible, Industrial Waste
- RPPC Recycling Rates
- Process for LEA Designation Withdrawal, and Board Designation Approval, Withdrawal and Decertification
- Conflict of Interest Code

2003

- Construction, Demolition and Inert Debris Transfer/Processing
- Construction, Demolition and Inert Debris Disposal -
- Compostable Materials Handling
- Waste Tire Monofills
- Solid Waste Inventory of Violations
- Temporary Waiver of Conditions
- Closure/Post-Closure Requirements
- Waste Tire Facilities
- Waste Tire Haulers and Manifests

Attached is a chart providing additional details regarding these regulations. Copies of the Economic Analysis and Form 399 for these regulations can be provided upon request.